NEW BOOKLET AND LEAFLETS

Absopure

From the Absopure Frigerator Division of the Generål Necessities Corp., Detroit, Mich., comes a folder devoted to the electric ice cream cabinets. The different models available are shown with specifications on each. Another folder issued by the Frigerator Division shows the application of Absopure equipment to commercial installations.

Allison

The Domestic Electric Refrigerator Corp., 2 W. 46th St., New York City, sends us a folder illustrating the Allison refrigerator unit and the Ply-Metal refrigerator cabinet. Specifications on both the unit and the cabinet are given.

Climax

The Climax Engineering Co., of Clinton, Ia., is distributing a 16-page book fully describing and illustrating the different models of electric refrigerating machines manufactured by them. A diagram showing typical installation of the two-ton machine appears as well as numerous photographs of buildings in which Climax refrigeration is being used. Testimonials from a number of users are also shown. A folder has also been issued giving specifications of Climax fractional tonnage machines. Another 16-page book is available giving facts in regard to Climax mechanical refrigeration presented in convenient form for architects, engineers and contractors.

Cooke

The Cooke Electric Refrigeration Co., 14-30 N. Green St., Chicago, has sent in an attractive 18-page book illustrating the various models manufactured by the company for domestic use. The advantages of Cooke refrigeration using ammonia as a refrigerant are included. Specifications and cut-away illustrations giving details in regard to the machine are also shown.

Cork Import

Cork Import Corp., 345 W. 40th St., New York City, has issued a folder giving six reasons for the superiority of Novoid cork board and telling of its manufacture. A number of testimonials are included.

Frick

Several booklets have been received from the Frick Co., Waynesboro, Pa., one of these entitled "Ice and Frost" illustrates a number of different refrigerating machines manufactured by the company. The second booklet shows a cut-away model and enlarged views of the various parts going into the machine. The third booklet illustrates the Frick enclosed type compressor in large sizes. Another booklet with the heading "refrigeration for every purpose" illustrates the use of Frick equipment dairies, ice cream plants, markets, hotels and other uses.

Heil

A leaflet has been issued by the Heil Co., Milwaukee, Wis., manufacturers of sanitary milk tanks, showing their construction and telling of their use by a number of the larger creameries. Data in regard to their insulation and temperature maintained is given.

Iceless Cooler

The Iceless Cooler Corp., 225 N. Michigan Ave., Chicago, successors to the Utilities Cabinet Corp., of the same address, has sent in a folder illustrating their "Revolvo" ice cream cabinets and "Revolvo" fountainette.

Jewett

The Jewett Refrigerating Co. of Buffalo has sent us three booklets designed for distribution to prospective refrigerator purchasers. The first one is entitled "Modern food preservation a vital importance, not merely a convenience;" the second, "Facts you should know about refrigerators," and the third, "We ask you questions and answer them, too." The booklets are well illustrated, particularly numbers 1 and 2, in which the details of Jewett construction are gone into.

Mueller

The October and November issues of the Mueller Brass Craftsmen, published by the Mueller Brass Co., Port Huron, Mich., have been received. The magazine contains many interesting articles of interest to both employees and customers of the company.

Nelson

The C. Nelson Mfg. Co., St. Louis, Mo., has issued a folder illustrating and describing their Duplex ideal ice cream cabinets for mechanical refrigeration.

Nizer

Nizer division of Electric Refrigeration Corp., Detroit, Mich., has recently announced an improved line of Kelvinator-Nizer electric ice cream cabinets. A folder is available showing the different units and giving specifications on each. Three small folders covering specifically the motor, condenser and gears in the improved cabinets are also available.

Plympton

The Plympton Refrigerator Co., Ellwood City, Pa., has issued a small folder illustrating their directed air flow refrigating sections for use with any refrigerant. Diagrams showing their placement in different types of installations are included.

Russ

From the Russ Mfg. Co., 5700 Walworth Ave., Cleveland, O., comes a broadside illustrating and describing the various models of defiance and superior soda fountains equipped with Kelvinator or Nizer systems. Special features of "built-rite" construction incorporated in these fountains are shown.

Savage

Savage Arms Corp., Utica, N. Y., are distributing a book which includes the history of the corporation, description of the Savage compressor, an explanation of the mercury system and photographs of the interior of the factory.

REQUESTS FOR INFORMATION

The following inquiries have been received by ELECTRIC REFRIGERATION NEWS. Readers who can supply information on these subjects are invited to write at once, referring to the Query number.

Query No. 42—"Could you find out names of schools or universities using electric refrigeration satisfactorily for keeping bodies an indefinite length of time for the purpose of studying anatomy?"

Query No. 43—"This company and its six branches located at Grand Rapids, Kalamazoo, Lansing, Saginaw, Toledo and Cleveland is interested in the distribution of a low-priced electric refrigerator to sell to our radio dealers over the supposedly dull summer period in the radio industry.

"We have better than seventeen hundred dealers in our territory and are very much under the impression that we could secure some very interesting business for the manufacturers of a well-known product at a low price."

Penn Magnet Switch Incorrectly Described

In the October 12 issue of this paper, under the heading of New Booklets and Leaflets, the following item appeared: "The Penn Electric Machine Co., of Des Moines, Ia., has sent in a sheet with illustration and specifications on the type L Penn magnetic magnet switch, suitable for use in electric refrigeration. This switch is designed for pressure and vacuum service."

The manufacturer informs us that this switch is properly termed a magnet switch, that it is primarily a temperature controller and that it may be adjusted and will maintain a two degree differential over its entire range of operation.

"PLEASE CHANGE MY ADDRESS"

Recent movements of Electric Refrigeration News subscribers as indicated by requests for changes in mailing addresses.

Baxter, H. S., from Michigan City, Ind., to c/o Copeland Refrigeration Co, 480 Lexington Ave., New York.

Best, W. A., from 541 Enright Ave., Cincinnati, O., to 541 Howell Ave., Cincinnati.

Billheimer, R. M., from 1167 Lakeview Ave., Detroit, Mich., to 6820 Delmar Ave., St. Louis, Mo.

Coppock, C. H., from Kelvinator, Inc., Detroit, Mich., to 15 Jefferson Court Bldg., Orlando, Florida.

Goldthwaite, R. S., from 2415 Division St., Evansville, Ind., to 412 Whites Ave., Marion, Ind.

Johner, Paul, from Y. M. C. A., Detroit, Mich., to 1620 Kenneth Ave., Arnold, Pa.

Jordan, L. M., from 39 Boylston St., Boston, Mass, to 32 Market St., Plymouth, Mass.

Kumler, H. W., from Electric Refrigeration Corp., Plymouth Rd., Detroit, Mich., to 2322 Griggs Ave., Cincinnati, O.

McClelland, W. A., from 267 Main St., Hackensack, N. J., to 61 Washington St., Newark, N. J.

McIntyre, C. G., from Frigidaire Corporation, Dayton, O., to 401 Central Bank Bldg., Oakland, Calif.

Meurs, G. E., from 52 Main St., Port Washington, N. Y., to 160-10 Sanford Ave., Flushing, N. Y.

Mitchell, Thos. A., from 126 S. 15th St., Philadelphia, Pa., to 139 Beaumont Ave., Philadelphia, Pa.

O'Brien, J. E., from 620 S. Delaware Ave., Philadelphia, Pa., to 139 Beaumont St., Manhattan Beach, Brooklyn, N. Y.

Richardson, R. E., from 1775 Broadway, New York City, to 1375 W. Grand Blvd., Apt. 107, Detroit, Mich.

Schilling, Earl, from Midwest-Timmerman Co., Dubuque, Iowa, to Baraboo, Wisc.

Schomp, Donald E., from 7720 Grand River, Detroit, Mich., to 5245 Seebaldt St., Detroit, Mich.

Shaffer, Elmer F., from 195 Laurel Ave., Buffalo, N. Y., to 430 S. 40th St., Philadelphia, Pa.

Spreen, C. C., from 3000 East Grand Blvd., to 3050 East Grand Blvd., Detroit, Mich.

Van Duzen, E. W., from Absopure Frigerator Division, General Necessities Corp., 1560 Theodore St., to Apt. 902, Clifford Hotel, Detroit, Mich.

Wines, Harry J., from 1775 Broadway, New York City, to 2730 Sedgewick Ave, New York City.

Wootton, Gordon, from Philadelphia Copeland Refrigeration Co., 126 S. 15th St., Philadelphia, Pa., to Philadelphia Copeland Refrigeration Co., 4903 Baltimore Ave., Philadelphia, Pa.

NEW BOOK AVAILABLE ON REFRIGERATION PRINCIPLES

Principles of Refrigeration, by W. H. Motz, M. E., published by Nickerson & Collins, 5707 West Lake Street, Chicago, is described by the publishers as "a comprehensive treatise on fundamental principles of operation of ice making and refrigerating machinery, properties and values of principal media used in modern refrigerating apparatus; transmission of heat, functions and values of insulating material; construction and operation of various parts of refrigerating apparatus, and application of refrigeration to its varied uses."

This book, which was originally distributed as a series of lectures to members of the Association of Practical Engineers, contains much information and data that will be of interest to the practicing refrigeration engineer. The author states that "in general the work contains information that is necessary for the refrigerating engineer in order that he may have complete and up-to-date knowledge of the theory and practice in this field of endeavor. The work is in every day language and is as free as possible from higher mathematics."

Included in the six hundred and fifty-seven pages of this volume are numerous illustrations, diagrams and graphs used in explaining and illustrating certain points in connection with the subjects taken up. The subject of the household machine is not given particular attention, but the principles upon which the various types of machines operate are thoroughly explained. Orders for *Principles of Refrigeration* may be placed through ELECTRIC REFRIGERATION NEWS at the publisher's price of $5.00 for the cloth bound volume or $6.00 for flexible Morocco with gilt edge.

Electric Refrigeration Displayed at Queens Exposition

Electric refrigeration was one of the features of the Queens Exposition which opened at Long Island City on October 22. Mayor "Jimmy" Walker opened the Exposition by pushing a button.

Electric refrigeration displays were maintained by six different companies. One of the most interesting of these displays was the demonstration of the gas absorption type refrigerator.

A. S. R. E. Accepts New Members

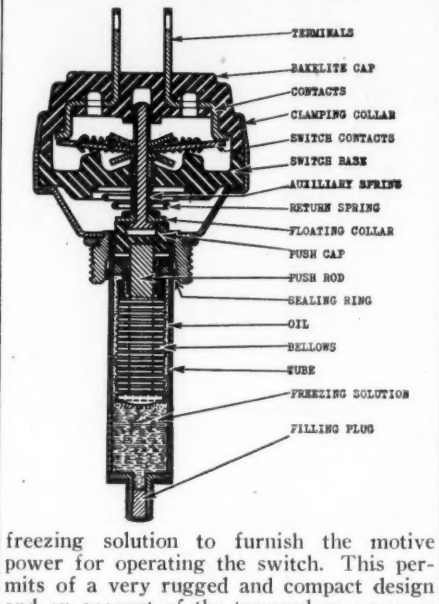
Charles T. Staab, of the Seeger Sales Corporation, 389 Madison Avenue, New York City, and Herbert Vail Bowers, of the National Ammonia Company, Inc., 81 Fulton Street, New York City, were elected as members of the American Society of Refrigerating Engineers at the first fall meeting of the New York Section of that organization held September 21 at the Machinery Club, 50 Church Street, New York City.

"Your publication is indeed a very fine one and I am sure that it will continue to be a big success."—H. E. Fisher, office manager, Domestic Electric Co., New York City.

NEW REFRIGERATOR CONTROL ANNOUNCED

The Automatic Reclosing Circuit Breaker Company of Columbus, Ohio, has recently placed on the market a new control for electric refrigerators. The accompanying cut shows the type "M" control.

According to the manufacturers this control depends on the expansion of a



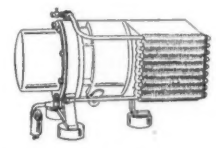
freezing solution to furnish the motive power for operating the switch. This permits of a very rugged and compact design and on account of the tremendous pressure which may be developed by a freezing solution the switch contacts have plenty of pressure to insure positive operation.

Because of the fact that a given solution always freezes and thaws at a given constant temperature, this control requires no adjustments after once being filled. The switch contacts are so constructed as to make a very quick make and break.

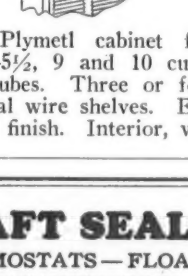
The control may be used either on brine tank or open coil types of refrigerators and are built for operation on any temperature between zero and 32° F.

ALLISON ELECTRIC REFRIGERATION

The Domestic Electric Refrigerator Corporation, 2 West 46th Street, New York City, announce a new electric refrigerating machine used in 5½, 9 and 10 cu. ft. (food storage capacity) cabinets.



Compressor and direct conected induction motor that drives it are hermetically sealed inside the metal casing and immersed in oil. Rotary type compressor. No gears, pistons, chains or belts. Ethyl Chloride Refrigerant. One-eighth horsepower motor, hollow drive shaft. Fan sets behind drive shaft.



Allison Plymetl cabinet food storage capacities—5½, 9 and 10 cu. ft. Three trays, 72 tubes. Three or four non-corroding metal wire shelves. Exterior Plymetl, Duco finish. Interior, vitrolite.

THE CONDENSER

A CLASSIFIED COLUMN OF OPPORTUNITY

REPLIES to box number advertisements should be addressed to Electric Refrigeration News, 554 Maccabees' Bldg., Detroit, Mich.

ADVERTISING RATES—this column only:

POSITIONS WANTED (special rate if paid in advance): 50 words or less, one insertion, $2.00, additional words 4 cents each. Three insertions, $5.00.

POSITIONS AVAILABLE, For Sale, Business Opportunities, and all other classifications (special rate, if paid in advance): 50 words or less, one insertion, $3.00, three insertions $8.00, additional words, 5 cents each.

LINE RATE (open account): 50 cents per line.

POSITIONS WANTED

Chief Engineer available, connected with leading electric refrigeration concerns past eight years. Inventor and owner of patents on thermostat control and seals. Well acquainted with patent situation. Experienced designing engineer. Box No. 52.

Sales Executive desires new connection December, or January 1st. Excellent record on sales and sales organization. Prefer distributorship, or branch managership on west coast or middle west. Box 54.

Refrigeration engineer, technical graduate, with a number of years experience on household and commercial machines and special experience in chemical, thermodynamical and physical research work, wishes to connect with a manufacturer of household and small commercial refrigerating machines. Also experience in designing. Box No. 57.

FOR SALE

Factory buildings, machinery, tools, patterns for commercial machine. Equipment practically new. Will sell on time payment or lease. No objection to accepting stock in another company for entire assets, or consolidating with another company, putting in additional capital, if desired. For further information address J. F. Brown, 209 Lee St., Zanesville, Ohio.

Salesman For Florida

Good opportunity for few live Electric Refrigeration salesmen to sell Kelvinator in some of best Florida territory. Only clean-cut producers wanted. Liberal commission. Address Kelvinator-Dow, Inc., Lakeland, Fla.

N. E. L. A. Announces New Series of Booklets

The National Electric Light Association, 29 West 39th St., New York City, announces that a series of articles, under the general heading, "More Power to the Home," are now available for distribution.

The articles written for the woman of the house fall under the following divisions: "Wiring the House," 10c each, 9c for lots of ten or more; "Better Lighting," 15c each, 14c for lots of ten or more; "Washing," 10c each, 9c for lots of ten or more; "Ironing," 12c each, 11c each for lots of ten or more. Future articles to be prepared are: motor driven appliances, cooking, refrigerating, and miscellaneous electric household devices. Sample copies of the booklets mentioned may be obtained upon request from the National Electric Light Association offices.

"I think your publication is showing great strides and I notice great improvement in each successive issue. You are to be commended."—L. R. Edwards, General Electric Co.

SHAFT SEALS
THERMOSTATS—FLOATS
HIGH PRESSURE CUT-OUTS
LIGHT STAMPINGS
Automatic Controls for Refrigeration and Oil Burners
GOODNOW & BLAKE MFG. CO.
3840 BEAVER STREET DETROIT, MICH.

Patented—Springless Automatic
Builders of Distinctive Refrigerator Hardware *for*
Patented TRIPLOCK
Electric Refrigeration
WINTERS & CRAMPTON MFG. CO.
GRAND RAPIDS, MICH.

REFRIGERATION STAMPINGS
We Specialize in the Design and Manufacture of
ICE CREAM CABINETS
We make them complete or furnish parts separately
Brine Tanks - Cooling Units
Unit Supporting Bases and Perforated Metal Covers
METAL HOUSEHOLD REFRIGERATORS (*Complete*) OR CAN FURNISH OUTSIDE STEEL PANELS, INSIDE LININGS, LOUVERED PANELS, LEGS, ETC., SEPARATELY
We Have a Competent Engineering Staff to Help You - We Solicit Your Inquiries and Specifications
MOTORS METAL MFG. CO. - DETROIT MICHIGAN

Subscription Order

BUSINESS NEWS PUBLISHING CO.
554 MACCABEES BLDG.
DETROIT, MICH.

Gentlemen:

Please enter my subscription to ELECTRIC REFRIGERATION NEWS, the Business Newspaper of the Electric Refrigeration Industry.

United States: ☐ $1.25 per year ☐ Two years for $2.00.
Foreign Countries: ☐ $1.50 per year.

I am enclosing payment in the form of

☐ Check ☐ P. O. Order ☐ Cash ☐ Stamps

Name .....

Street Address .....

City and State .....

Remarks: .....

☐ NOTE: If it is inconvenient for you to enclose payment with this order, check this square and invoice will be mailed. Do it now, while you have the blank before you. It will save the time and trouble of writing a letter and you will be sure to get the next issue.

ELECTRIC REFRIGERATION NEWS

The business newspaper of the electric refrigeration industry

VOL. 2, NO. 6, SERIAL NO. 30 | DETROIT, MICHIGAN, NOVEMBER 23, 1927 | Entered as second class matter August 1, 1927, at the Post Office, Detroit, Michigan. | PRICE TEN CENTS

SUPPLY JOBBERS STUDY PROBLEMS OF DISTRIBUTION

Alex. Dow Welcomes Delegates and Makes Prediction for 1928

Approximately 500 delegates attended the semi-annual meeting of the Electrical Supply Jobbers' Association, held at the Book-Cadillac Hotel, Detroit, November 14-18. The first two days of the convention, Monday and Tuesday, were devoted to meetings of the executive and merchandising committees having reports to be made at the general sessions to follow. At the general meeting, opened on Wednesday morning, G. E. Cullinan, chairman of the board, Electrical Supply Jobbers Association, presented Alexander Dow, president of the Detroit Edison Co., who welcomed the delegates to Detroit.

Mr. Dow referred to the harmony existing in the city among electrical interests, stating that the spirit of "live and let live" which has been in evidence in the city has contributed much to its growth. He also stated that he expects 1928 to be a good business year, with a wholesome caution in evidence until late spring, when crop reports will have been made. By July, 1928, a definite upward trend will be in evidence, according to Mr. Dow.

G. P. Rogers, New Director, Presented to Delegates

Following the welcome address of Mr. Dow, Granville P. Rogers, new managing director of the E. S. J. A., was presented. Mr. Rogers made a short address upon the broader aspects of the industry, stating that it would be necessary for the E. S. J. A. to work out its problems in the same manner as have similar organizations in other industries.

The afternoon meeting was opened with

(Continued on Page 3, Column 1)

PUBLIC UTILITY MAN SEES BIG FUTURE FOR SMALL COMMERCIAL MACHINE

The November meeting of the New York section of the American Society of Refrigerating Engineers was held Wednesday evening, November 16, at the Queens Chamber of Commerce of Queens Borough. Present at this meeting were 85 members and guests. The entire New York section was invited as guests of the New York and Queens Electric Light and Power Co., and President Bennis opened the meeting with a vote of thanks to the New York and Queens Co., for the hospitality to the New York section.

President Bennis then introduced H. L. Snyder, vice-president of the New York and Queens Electric Light & Power Co., who made an address of welcome to the members and related the growth of the Borough to Queens and also that of his own company during the last fifteen years.

Following Mr. Snyder, C. A. Barton, general commercial manager of the New York and Queens, gave some figures concerning the growth of electric power for refrigeration in Queens. Mr. Barton then went into detail regarding the future of the small domestic machine and the enormous part of this field that has not been taken care of as yet. Mr. Barton laid particular stress on the importance of the smaller dealers such as the delicatessen and small butcher shops that are large potential customers for small refrigerating equipment, and stated his belief that in the next decade there will be a remarkable growth in this field.

Following Mr. Barton, Mr. Bennis introduced John Adams and C. H. Schaefer, executives of the Breyer Ice Cream Co., who spoke on their new plant at Long Island City. The party adjourned to the Breyer plant, where they had an opportunity of making a personal inspection of it.

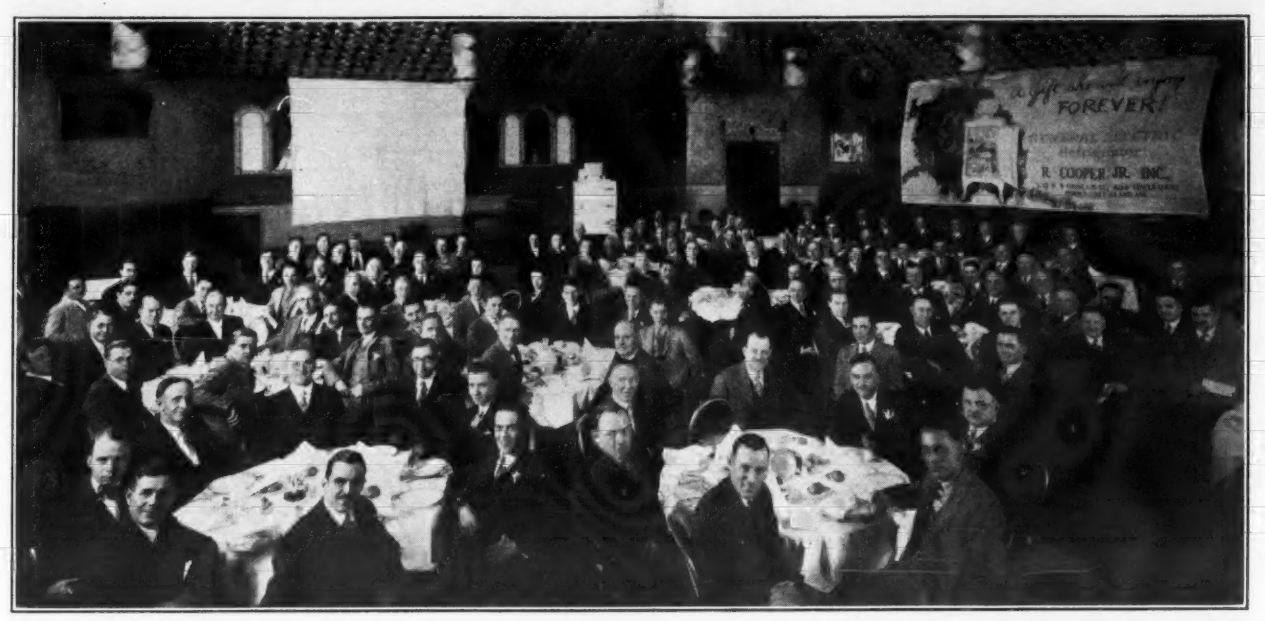
Woodbridge Addresses Outdoor Advertisers

C. K. Woodbridge, president of the Electric Refrigeration Corp., Detroit, and head of the International Advertising Association, addressed the Outdoor Advertising Association of America at its convention, held October 17-21 at Hotel Ambassador, Atlantic City, on the subject "Outdoor Advertising From the Advertiser's Viewpoint."

An Outstanding Sales Feature for **REFRIGERATORS**

WIRES PATENTED
"AIRTITE"
CUSHION
GASKET

"A Gift She Will Enjoy Forever!" Poster Message in Christmas Campaign



The dealer organization of R. Cooper, Jr., Inc., General Electric distributor in Chicago, meet at the Hotel Sherman, November 8, to discuss winter business and the holiday drive. See article on page 12.

A. S. R. E. ANNOUNCES ADDITIONS TO PROGRAM FOR ANNUAL MEETING

The American Society for Refrigerating Engineers announces several additions to the program to be offered at its twenty-third annual meeting at the Hotel Astor, New York City, December 5-7, as previously given in the November 9 issue of ELECTRIC REFRIGERATION NEWS.

William J. Donovan, assistant attorney general of the United States, has been secured to head the program. F. W. Smith, vice-president and general manager of the United Electric Light & Power Company, will present the viewpoint of the power companies on the subject of refrigeration.

A tour and inspection of refrigeration installations in New Jersey will be conducted and will include passage through the recently opened Holland tunnel, which has attracted the attention of engineers throughout the world.

NEW YORK SAFETY CODE HAS HAD FINAL HEARING

Presented to Board of Aldermen At Meeting Yesterday

The final hearing on the proposed revision of the New York City safety code was held before the Welfare Committee of the Board of Aldermen in New York City on November 18. Although the hearing was fairly well attended, a number of the manufacturers were not personally represented in the discussion of the amendments offered for final consideration of the committee. The New York City fire department was represented by C. K. Michaels, who at the close of the hearing was congratulated for his several years' work on the safety code.

H. D. Edwards, F. E. Matthews and E. T. Williams spoke on behalf of the American Engineering Standards Committee and the American Society of Refrigerating Engineers' respective code committees. Mr. Edwards is chairman of the joint sub-committee on mechanical refrigeration safety code for the two organizations.

Among others taking part in the discussion were: C. C. Spreen, chief engineer Kelvinator division, Electric Refrigeration Corp.; A. J. Curley, Electric Refrigeration Corp.; Fremont Wilson, C. E., New York City; C. M. Eakin and J. Edward Murphy, Frigidaire Corp.; Prof. J. B. Churchill, Icemaster Co.; J. L. King, N. Y. Board of Fire Underwriters; and Murray Hearn, Copeland Products, Inc. R. Duell, counsel for the Consolidated Gas Co., spoke on behalf of his client for the use of the Electrolux-Servel machine.

The amended code was not considered at the regular meeting of the Board of Aldermen November 22, but may be presented Friday, November 25.

The proposed ordinance was published in full in the July 20 issue of ELECTRIC REFRIGERATION NEWS. In the November 9 issue was reported the proposal of a number of amendments offered at a meeting held before the Welfare Committee on October 28.

REFRIGERATION SHOULD GET INTO THE XMAS BUDGET

Dayton Company Pushes Line the Year 'Round

By J. C. Matthieu, Commercial Manager, Dayton Power & Light Company

"Regarding my views on the merchandising possibilities of electric refrigeration as Christmas season effort, I can only say that I am with you one hundred per cent in all you can say regarding the value of this activity, not only from the standpoint of the central station merchandiser, but from that of the customer as well.

"In these days of large family budgets for Christmas use and the constantly increasing practice of giving the higher priced and more generally useful, as well as ornamental gifts, it is easy to visualize the attraction such a device as the electric refrigerator would have to the thinking family head at this season.

"It is needless for me to attempt to outline either the possibilities of this type of merchandising to the trade, or the many and outstanding points of appeal this method of refrigeration has to the public at large. The decorative, or ornamental attributes of the modern home refrigeration unit as well as its sanitary, economic and health preserving qualities have been covered completely and effectively many times and is a matter of universal knowledge. The pride of possession of such a unit in the home is an accepted fact. It is only necessary to ask any owner as to his opinion and you will receive the enthusiastic comments and prideful remarks that heretofore have been exclusively reserved for the large fish caught when last in Canada—the time he shot a birdie on number three—or, last but not least, a discussion of his new 'bus.'

"Owing to our specialized merchandising set-up in Dayton, we do not accentuate electric refrigeration at any special time, as we have a fully manned and effective refrigeration department in action at all times.

"Personally, and from every angle, I regard this activity as one of the most valuable ever entered into by the central station, and we in Dayton have already gone into the game with every effort logically possible.

"I am sure that any central station taking up this comparatively new development of our industry will find the reaction as positive and as satisfactory as we have here."

Hartford Shop to Distribute Ice Berg Line

The Bishoff Electric Shop, 288 Asylum Street, Hartford, Conn., has recently added electric refrigeration to its line of electrical merchandise. The company is featuring the Ice Berg Refrigerator in a newly arranged showroom, and will act as distributor.

Formed condenser coils

No Scale. Smooth inside. Formed and fabricated to your order. Write for Prices

1431 Central Ave., Detroit, Mich.

WOLVERINE
SEAMLESS COPPER AND BRASS TUBING

ELECTRIC COMPANY OFFERS SPECIAL TERMS FOR XMAS SALES

By A. C. Linen, Manager, Appliance Sales, The Philadelphia Electric Co.

The Philadelphia Electric Co. aggressively promotes the sale of electric refrigeration, and we believe that the Christmas season is a time when special effort should be put behind the subject. We plan this year to devote considerable showroom and window space with the idea of suggesting an electric refrigerator as a practical gift, from which the entire household can enjoy some benefit.

During the month of December we will offer special terms of $20.00 down and the balance in twenty-four equal monthly payments.

In view of our special terms and increased advertising during the Christmas season, we anticipate a substantial refrigeration sales increase.

BEVERAGE MEN HOLD CONVENTION IN NEW ORLEANS

Authority Tells Bottlers That Sugar Is Superior to Alcohol as a Stimulant

The need for mechanical refrigeration in the carbonated beverage industry was discussed at the annual convention of the American Bottlers of Carbonated Beverages at its meeting held at International Trade Exposition halls, New Orleans, November 14 to 18. About 6,500 were present. Much of the discussion was on the comparative costs of ice and electric current, but it seemed to be generally admitted that lower temperatures could be obtained and held with mechanical units, insuring more palatable drinks. Dry cold insures the labels on bottles staying affixed. Several new state laws are man-

(Continued on Page 3, Column 2)

DETROIT FOOD SHOW ENDORSES REFRIGERATION

Many Food Products Served from Electrically Chilled Cabinets

The increasing acceptance of electric refrigeration as the ideal means for properly preserving food products was very apparent at the Sixth Annual Food Show and Household Exposition held in Detroit November 10-20. Many of the manufacturers presented attractive displays of several of their models, and a number of the food booths served their perishable products from electric refrigeration equipment supplied by manufacturers on a co-operative basis. Attendants at a number of the booths remarked that visitors were very often more interested in the method of preserving the foods being served, than in the foods themselves. In such cases visitors were directed to the display of the manufacturer of the refrigerating equipment.

Exhibits at Show

The Norge-Daniels Company, 2567 West Grand Blvd., Detroit, had five household units of various sizes on display. Both Norge and Alaska refrigerators were shown with Norge refrigerating units installed. Special attention was called to the Norge rotary compressor with its three movable parts.

The Dalrymple - Kelvinator Company presented for the first time in Detroit the new colored model cabinet Kelvinator. The particular one on display was of a rather light shade of green, with a darker green border; the perforated panel at the base of the cabinet being in a cream shade. The interior of the cabinet was filled with appetizing foods. One of the new model all-porcelain Leonard Cleanable cabinets, Kelvinator equipped, was also shown. Distribution was made of the Kelvinator Home Service Bulletin. The booth of Orling Brothers, Detroit meat packers,

(Continued on Page 2, Column 2)

CHICAGO ABSOPURE BRANCH TAKEN OVER BY ALADDIN UTILITIES

Announcement is made by David A. Brown, president, General Necessities Corporation, that their Chicago retail branch, 1222 South Michigan Avenue, has just been taken over by the Aladdin Utilities Corporation, thus giving Absopure a distributing outlet in this important market and providing an experienced sales and service organization.

They will occupy the entire four-story Absopure Building, which has 50,000 square feet of floor space. Recently this building was remodeled and refitted throughout at great expense. It will be used exclusively for displaying Absopure electric refrigeration systems. Every Absopure model for the home, apartment house and commercial installation will be displayed there.

The Aladdin Utilities Corporation, of which Howard F. Leopold is president and Charles H. Cress, secretary and treasurer, until recently handled a line of electric refrigerators designed for domestic or household purposes only. Their sales in Chicago during 1927 amounted to $750,000. Their contract with Absopure calls for a business of $1,500,000 in 1928.

The Aladdin Utilities Corporation will act as Absopure distributors in Cook, Lake, Du Page and Will counties, Illinois.

Copeland Display at Milwaukee Exposition

What more appropriate setting for a display of electric refrigerators than a food show combined with a household exposition? The Copeland Refrigerator Co., Milwaukee, is responsible for the presentation above.

S. E. D. PUTS OKAY ON ALL-INDUSTRY UNIFICATION PLAN

"To Embark On An All-Industry Program with Splendid Promise"

For the first time in the annals of the electrical industry a unified plan has been adopted by the industry's executive personnel and providing for the co-ordination of the several allied activities of inter-association and inter-league work, according to announcement just made in a joint letter to the industry signed by the presidents of the four national associations, the chairman of the League Council, and the president of The Society for Electrical Development.

Completion of this all-industry plan of operation, which establishes the S. E. D. as the industry's common meeting ground or forum, has been ratified by the Board of Directors of the Society after hearing from planning committees representing the interests of the National Electric Light Association, the National Electrical Manufacturers Association, the Electrical Supply Jobbers Association, the Association of Electragists, International, and the League Council.

On behalf of all branches of the industry, the signers of the joint communication urged upon their respective constituents the necessity for giving to the proposed unification plan their thoughtful consideration and unqualified support.

Effectiveness of this unification proposal, is predicted upon the establishment of an adequately financed working program for The Society for Electrical Development—this organization presenting itself, in the minds of the association presidents and the Council chairman, as a ready-made instrument available for use by every branch of the industry in the forthcoming year when unity of market purpose appears to have such an important bearing on the future well-being of the industry.

Must Recognize Market Co-ordination

In approaching this problem of establishing a central clearing house for the industry, the S. E. D. directorate, acting as a committee of the whole for the entire industry, appointed four planning committees to crystallize sentiment and search out the facts which could govern the inter-association and league movement.

It was the consensus of these four planning committees, after making studies within and without the industry, that there must be no lessening of present co-operative measures now encompassed by those operations clearing through The Society for Electrical Development. On the contrary, there was an undivided conviction, that if the electrical industry is to hold its own in the present keenly competitive trade markets, it must not fail to recognize and meet the prevailing trend toward market co-ordination all along the line.

Therefore, while it was deemed advisable to plan next year's program conservatively, it was the unanimous thought of the industry's executive personnel that all current S. E. D. operations be continued and strengthened, and where feasible, amplified.

In explaining this point further, the signers of the joint industry letter stated: "The need for an effective co-ordination of the association work of the four branches of the industry is self-evident. The Society was conceived and established to promote co-operation in the industry and stimulate the electrical business. But it was a loose pulley—not belted to the organized industry and for years it has struggled under this serious handicap."

S. E. D. the Industry Forum

Under the new program of unification, with the league an essential part in the scheme of things, the Board of Directors of the S. E. D. is established as an industry forum, by having the principal officers of the several associations and the leagues serve as members of the board—definitely providing for the desired harmony of action and for co-ordination of activities. The S. E. D. staff is thus available as the central service organization to function in carrying out national industry programs as they are agreed upon.

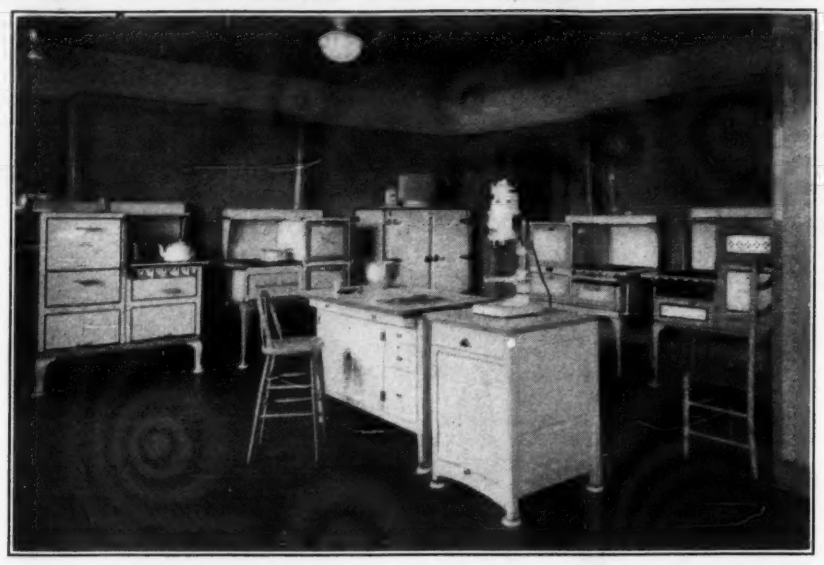
Pointing out that the Society "has been successfully refinanced," and that it is now ready "to embark on an all-industry program with splendid promise," the joint letter emphasized that the best evidence of industry solidarity and its desire to achieve the many-sided benefits of this market unity lay in "this organization of The Society for Electrical Development and in the more active program of industry promotion which is to follow."

Peerless Ice Machine Co. Moves

The Peerless Ice Machine Company announces its removal from 503 S. Jefferson Street, Chicago, to 515 W. 35th St., in that city. The company has just recently completed the erection of a new factory.

"ELECTRIC REFRIGERATION NEWS is of great interest and is serving a purpose that no man interested in electric refrigeration can afford to overlook. I am very strong for the success of this NEWS."—A. J. Duffy, General Electric Co., Detroit, Mich.

American Stove Co. Model Kitchen



Gas ranges manufactured by the American Stove Co., Cleveland, are tested in the research kitchen shown above. Foods used in these tests are kept in an electric refrigerator. Every modern kitchen convenience is included in the cooking equipment. Note the portable mixer on the table.

NEBRASKA POWER CO. GETS CHRISTMAS BUSINESS WITH TEAS

Afternoon teas in connection with the Christmas merchandising of electric refrigerators have been found successful by the Nebraska Power Company, Omaha. The November issue of *Electric Merchandising* carries a description telling how Miss Robertson of the Nebraska Power Company sold twelve electric refrigerators as Christmas gifts.

On November 15 letters were mailed to a number of men in the city considered good prospects, calling attention to the excellence of the electric refrigerator as a Christmas gift and stressing the necessity for winter refrigeration in modern heated homes. A definite date was mentioned when a company representative would call. If on calling at the appointed time the salesman was unable to get the proper interest from the prospect, the lady of the house was notified to attend one of the afternoon teas held at the company's sales office.

At these teas frozen desserts were served and the names of the ladies taken, with all remarks in regard to electric refrigeration recorded and passed to the salesman. This complete plan and follow-up, based on the afternoon tea demonstration, proved a highly successful method of increasing Christmas business according to the Nebraska Power Company.

MANY DISPLAYS AT DETROIT FOOD SHOW USE REFRIGERATION

(*Continued from Page 1*)

contained an Oriole illuminated market display case and market cooler, Kelvinator equipped. The Highland Park Creamery Company, Detroit, served samples of their Cream Top brand milk from a 9-ft. all-porcelain cabinet Kelvinator. An Oriole case, Kelvinator chilled, in the booth of the Jello Company, Inc., displayed a number of pleasing effects in molded Jello. Good Humor ice cream suckers were served from a Nizer six-hole ice cream cabinet. Tasty desserts were served by The Junket Folks, Little Falls, N. Y., from a 9-ft. model cabinet Kelvinator.

Frigidaire Corporation specialized in commercial equipment, showing an 8x8 walk-in type market cooler manufactured by the Dry-Kold Refrigeration Company, Niles, Michigan, and chilled by Frigidaire equipment. A market display case, also by Dry-Kold, was shown filled with cuts of meat. One domestic unit was also included in the display.

The Fairmount Creamery Company display used Frigidaire equipment, which included a six-hole ice cream cabinet, in which Frost Bites were stored, a market display case filled with fresh meats and a similar case containing a number of designs modelled in products manufactured by the Fairmount Creamery Co. The display cases were manufactured by the Ligonier Refrigerator Company, Ligonier, Ind.

In the display of Wm. Suchner & Sons, Detroit, Frigidaire equipment was installed in a Keystone market display case manufactured by the Keystone Refrigerator Company, 1572 Gratiot Avenue, Detroit. The case was filled with attractively arranged meats.

The Allison Appliance Company, Francis Palms Building, Detroit, showed two of their household models featuring the Plymetl cabinet and the Allison refrigerator unit, manufacturd by the Domestic Electric Refrigeration Corp., 6 West 46th St., New York City.

The Electric Utilities Corporation, 3098 E. Grand Blvd., Detroit, featured three models of the General Electric refrigerator in an attractive presentation. Special lighting effects were used to contrast the white cabinets against a dark blue background.

The Miller-Hurst Corporation, 5-142 General Motors Building, Detroit, which has taken over the manufacture of equipment formerly made by the Universal Electric Refrigerating Corp., displayed an 8x8 ft. walk-in type market cooler manufactured by the Detroit Butchers Supply Co. A market display case by the same manufacturers was also included in the equipment cooled by a Universal ammonia machine.

Electro-Lux Servel, a gas refrigerator, was included in the display of the Detroit City Gas Co.

Walker Electric Refrigerator Co. displayed household units in 5½, 7½, 12 and 16 cubic foot sizes. The largest of these was fitted with glass doors, back of which perishable foods were displayed.

"We want MORE Refrigerators (says the Central Station) on our lines"

"We want MORE Refrigerators (says the Customer) that are right"

"We want to make MORE Refrigerators (says the Manufacturer) at a profit"

IF Good Performance is the answer to these demands—

1 Set up your Standards for Refrigerator Quality

2 Prove your Refrigerator by Test

In other words—

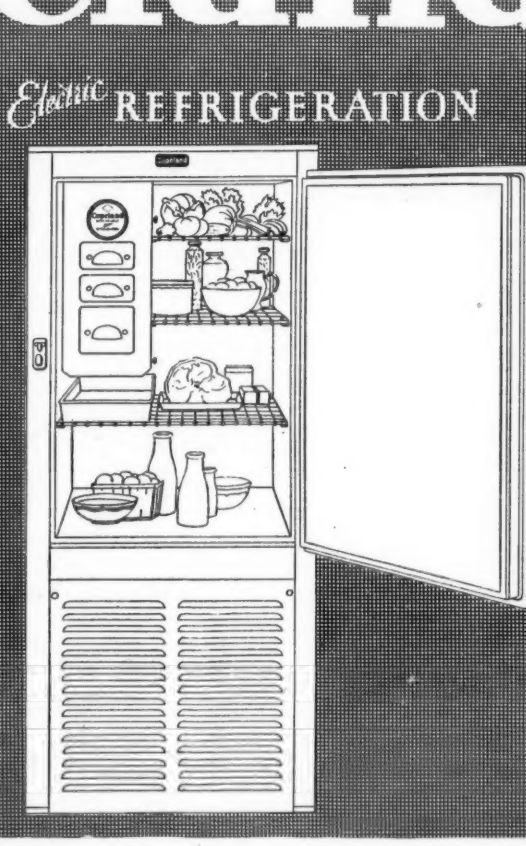
KNOW / -by Test

Electrical Testing Laboratories
80th Street and East End Ave.
New York ETL N.Y.

Thirty years in the Service of the Electrical Industry

Copeland

DEPENDABLE Electric REFRIGERATION



$195

F. O. B. FACTORY
Model N-5
55½" high . . . 24⅛" wide . . . 5 cu. ft. storage . . . 6¾ sq. ft. shelf area . . . 108 ice cubes.

Compact—Convenient—
Astonishing Capacity!

See the new Copeland N-5—the most compact electric refrigerator at low cost! More cubic feet of food storage space—more shelf area—more ice cubes than any other electric refrigerator of the price.

And many other advantages: completely enclosed silent unit; shelves at the proper height to eliminate bending; double depth dessert freezing drawer; no insanitary drain pipe; permanent white lacquer finish on steel; self-locking doors, "cold tray"; rapid freezing and quiet, economical, dependable operation.

If you live in a small home or apartment, you need this popular new model. Come in and let us explain how easily it can be purchased—and why it has no equal within many dollars of its price.

Dealers: *The introduction of this new Copeland, which so strongly meets a widespread need, again emphasizes the outstanding desirability of a Copeland franchise . . . and some territory is still available. Dealers who are interested in receiving complete information, write or wire to*

COPELAND, 630 LYCASTE AVENUE, DETROIT, MICHIGAN

Aladdin Utilities Executives and Absopure Officers Meet to Close Sale of Chicago Absopure Branch

The photograph above, taken in a section of the display room of the Chicago Absopure Frigerator branch office just before it was turned over to the Aladdin Utilities Corp., shows officials of both companies in meeting. David A. Brown, president of Absopure Frigerator Division of General Necessities Corp., and Charles H. Cress, general manager of Aladdin Utilities Corp., are in the front row. **See story on page 1, column 5.**

BUYING ON TIME DECLARED SOUND

Fifteen Months Study Shows It Brings Prosperity

Installment selling is not only a sound method of financing the distribution of merchandise, but is also a potent factor in the new prosperity of this country, according to Edwin R. A. Seligman, professor of political economy at Columbia University, who has recently completed a fifteen months' study of this question for the General Motors Corp.

This conclusion was expressed by Prof. Seligman before a group of 500 leading financiers, business men and economists at a dinner given in his honor at the Ritz-Carlton Hotel, New York, on November 18.

John J. Raskob, chairman of the finance committee of the General Motors Corp., expressed the feeling on behalf of his company, that being one of the outstanding users of installment plan selling, the company felt obligated to discover whether or not the financial stability of the country was being endangered by the use of this plan. In offering his approval of installment selling, Prof. Seligman declared it to be an agency which increased production, stabilized output, reduced production costs and increased purchasing power throughout the country.

In regard to the expression which appears from time to time, that a business depression would be considerably aggravated by outstanding consumers' credits, Prof. Seligman cited instances to show that it is at such times that bankers are compelled to continue to extend credits of doubtful soundness, whereas in installment credit the volume of outstanding paper diminishes constantly. Speaking of the abuses of the installment plan, Prof. Seligman said:

"Installment credit is beginning to do for the consumer what the gradual development of the commercial banking system has done for the producer. If the credit is restricted to the proper commodities, under proper management, it will gradually throw off its abuses and will stand forth as one of the most signal contributions of the twentieth century to the potential creation of national wealth and national welfare."

ELECTRICAL SUPPLY JOBBERS HOLD 5-DAY MEETING IN DETROIT

(Continued from Page 1, Column 1)

the presentation of the jobbers' medal and purse under the McGraw award to O. Fred Ross, president of the Electrical Supply Co., Newark, N. J. Earl Whitehorne, commercial editor of *Electrical Record*, made the presentation, stating that the award was given in recognition of individuals who have in a conspicuous manner given their time and thought to the jobbing industry.

Alvin E. Dodd, manager of the domestic distribution department, U. S. Chamber of Commerce, next delivered an address on "Facing the Facts in the Distribution Situation." Mr. Dodd indicated the concentrated effort being made by merchandisers to determine logical customers, and the area in which business can be profitably handled by individual wholesalers and dealers.

In finishing he urged the appointment of a Trade Relations Committee to determine a "Code of Trade Practices," and stated that the Federal Trade Commission would aid in policing such a work.

Manufacturers Banquet Salesmen

Manufacturers of electrical equipment were well represented at the meeting and provided the big entertainment feature of the convention in the form of a banquet at the Hotel Tuller on Wednesday evening, November 16. This event, the first of its kind in the history of the association, was decided upon in impromptu fashion at a meeting of the manufacturers Wednesday morning, with the thought that it would bring the jobbers and manufacturers together on a basis of good fellowship. Clinton Clark, chairman of the manufacturers committee, extended the invitation to the jobbers, and it was accepted with much enthusiasm. Practically all of the jobbers were present at the banquet that evening.

The general meetings held Thursday morning and afternoon were devoted to reports from various committees and a discussion of them by the delegates. At the general meeting held Thursday evening, John G. Jones, vice-president of Alexander Hamilton Institute, gave an address on the "Future of the Jobber." Mr. Jones traced the existence of the jobber from centuries back to the present time and showed that there is a definite place and need for the jobber in the business world. This talk was followed by an address by W. E. Sprackling, president of the Tubular Woven Fabric Co., on "Co-operative Market Development for the Electrical Industry." Mr. Sprackling brought out the need for organized effort on the part of the four main divisions. Particular reference was made to the Industry Sales Conference which convened on November 21.

The convention was brought to a close on Friday morning with a general meeting at which further reports from committees were presented and discussed.

NEW ORLEANS SCENE OF BEVERAGE BOTTLERS FIVE DAY MEETING

(Continued from Page 1, Column 4)

datory on having labels remain on until the beverage is consumed.

Mechanical cabinets were exhibited by the Hibbard Company, Cleveland, and Miller Bottle Cooler Company, who reported very satisfactory business. Frigidaire also exhibited Hibbard cabinets.

Lamson Company of Syracuse was represented by Harry W. Alexander, general manager of refrigeration, who, with Frigidaire, carried the banner of mechanical cooling at low temperatures. The Lamson Company specializes in industrial applications.

"The iceless bottle cooler gives the beverage industry all that the iceless cabinet gave the ice cream industry," B. J. Vandoren of Dayton said. "Uniform low temperatures, sanitation, convenience, prestige and advertising are all combined in the use of the mechanically refrigerated bottle cabinet. It is up to the manufacturer to co-operate and work with his retailers in buying or renting iceless cabinets."

The Lamson Company has a field sales force contacting the bottling trade and engineering specialists working exclusively on liquid refrigeration.

An address by Edwin E. Slosson, Ph.D., LL.D., director of science service, Washington, D. C., was given on "The Art of Keeping Cool and Comfortable." Dr. Slosson declared carbonated beverages played the same part in the United States that beer did in Germany and wine in Italy. He said that, contrary to belief, sugar, of which the average drink contains about two teaspoonfuls, was "superior to alcohol as a self-starter." Dr. Slosson said experiments showed that sugar is absorbed and consumed in the body as soon or sooner than alcohol.

W. E. Heibel Joins General Electric

W. E. Heibel, formerly in the advertising department of the American Stove Company, Lorain, Ohio, has joined the advertising staff of the Electric Refrigeration Department of the General Electric Co., in Cleveland. He was formerly with Fuller & Smith, Inc., Cleveland.—*Printers' Ink.*

an unusual Opportunity now open to distributors

EXCLUSIVE TERRITORY for

ARCO WAND

HEAVY DUTY

POSITIVE VACUUM CLEANER

THIS improved portable vacuum cleaner offers these exceptional advantages:

Presents no servicing problems. No increase in your present overhead. Fills in gaps between selling seasons. Gives unusual profit in proportion to sales effort. A stable proposition—a product of the American Radiator Company.

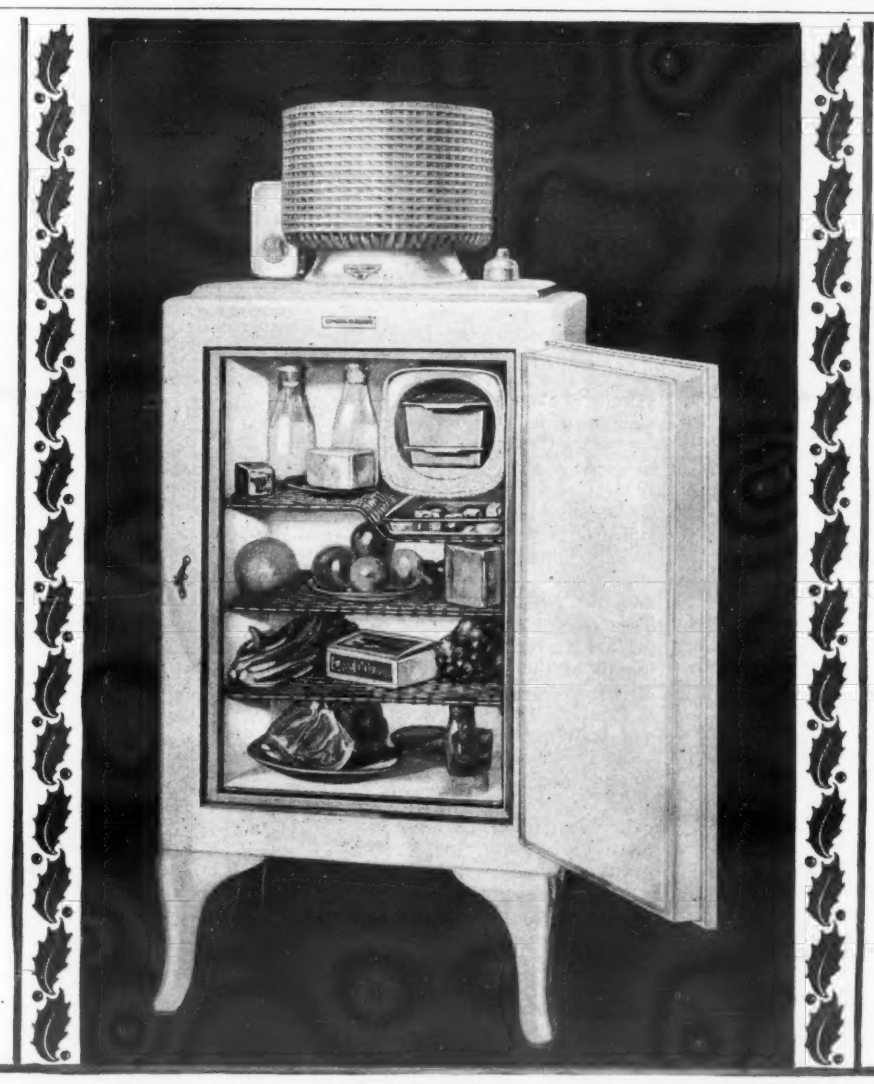
Here are some of its unique sales features... It takes out 50% more dirt than ordinary vacuum cleaners. Does its work in half the time. Consumes less current per square foot. Equipped for every kind of surface—rugs, draperies, upholstery, walls, floors. It is compact, quiet, 99.5% efficient. Saves labor—saves rugs—saves repair bills.

To get the exclusive distribution in your territory—write or wire us for particulars.

ARCO VACUUM CORPORATION

(DIVISION OF AMERICAN RADIATOR COMPANY)

40 WEST 40TH STREET, NEW YORK



Make it a "Holiday Special"

The General Electric Refrigerators may actually be classed as a holiday number. National advertising in magazines having a combined circulation of fifteen million copies, and forceful newspaper campaigns will sell the idea of the General Electric Refrigerator as an ideal gift for the whole family.

There are certain steps for you to take to get holiday sales. Have a good window display. Dress your window in the spirit of Christmas.

Advertise in your local papers using the special holiday advertisements which we have prepared for you. A series of five is now ready—get them from your distributor without charge.

Send direct-by-mail literature into selected homes, and finally, impress your salesmen with the idea that Christmas offers a real sales opportunity for you and for them.

GENERAL ELECTRIC

Refrigerator

ELECTRIC REFRIGERATION DEPARTMENT · OF GENERAL ELECTRIC COMPANY · HANNA BUILDING · CLEVELAND, OHIO

REFRIGERATION IN STEPS OF THE AUTO INDUSTRY

Average Advertising Cost $10.11 Per Unit

That the electric refrigeration industry has drawn heavily upon the automobile industry for both production and sales policies is the outstanding thought in an article headed "Electric Refrigeration, a Business Leader," by Charles E. Townsend, which appears in the November 12 issue of the *Advertiser's Weekly*. The writer's bird's-eye view of this industry appears in the opening paragraph. "Of all romances of American industry, none compares with that of the electric refrigerator for those elements which lay a powerful hold upon the popular fancy. Novelty of conception, magnitude of operation, speed of action, keenness of conflict—all these are present to a hitherto unimaginable degree. A billion-dollar investment, fifty square miles of plant, two hundred thousand employed, a million unit production and a ten-million-dollar advertising expenditure—that is the picture for 1927. How does it come about that an industry which ten years ago sold only 1,200 units and five year ago only 10,000 units, has become overnight an outstanding business leader? Why have sales more than doubled each year since 1924? The answer is—automotive experience."

Getting down to actual conditions, Mr. Townsend continues his comparison with the following:

"Indeed the situation, present and potential, in the refrigeration industry presents a striking similarity to the automotive industry. In the latter, six concerns do the great bulk of the business, with the General Motors Buick and Chevrolet far outstripping the competition in their respective price classes. In the former, according to W. R. Wilson, president of the Copeland Products, Inc., two concerns do 90 per cent of the business, while the General Motors Frigidaire claims to have sold more units than all the competition combined. Again, as in the automotive industry, a small host of manufacturers have rushed into the electric refrigeration business, many of them lacking either a sufficiently perfected product or a sufficiently strong financial backing to stand the gaff.

"In the meanwhile, the big three—Frigidaire, Kelvinator, and Servel—the big five, perhaps, now that General Electric has actively entered the field and Copeland has begun a powerful bit for inclusion in this group—are doing most of the business. Of course, there are strong and active concerns of the second rank which may eventually offer these leaders competition of a very real nature.

"In sketching the 1927 panorama in the electric refrigeration field, I have been extremely conservative with regard to probable production and advertising. If the estimates as supplied me by responsible executives of the various concerns listed, may be taken as typical, the probable total production will be closer to 1,500,000 units than a million units, and the combined expenditures for all forms of advertising will be close to $13,000,000."

From a survey made by Mr. Townsend, this $13,000,000 has been split into a figure of $10.11 as the average cost per unit for advertising. The highest advertising cost per unit found in the survey of fifteen companies was $26.66, and the lowest $5.21. The General Motors figure of $8.33 per unit is one of the lowest.

The attitude of public service and central station companies towards electric refrigeration is considered and the statement made that "The introduction of the appliance which in 1925 added $3,000,000 of revenue to the power companies earnings and which consumed more current than an electric iron, percolator, heater, sewing machine, fan, washing machine and a toaster combined, was of primary importance."

In concluding, a quotation from the *Wall Street Journal* is given, which in substance says that the best solution to the central station problem of utilizing its two-thirds idle capital lies in the immediate development of the residential load. In developing this load the intensive sale of the household electric refrigerator will more than double the present revenue from the home, and at the same time will not cost the power company more than one-tenth of one cent per kilowatt to produce.

FRIGIDAIRE DELCO MEN HOLD SESSIONS AT SIOUX FALLS AND BIRMINGHAM

Frigidaire and Delco Light representatives from Minnesota, Iowa, Nebraska, Wyoming and South Dakota met at the Sioux Falls offices of the company on October 31 for a two-day session. A discussion of Frigidaire was held the first afternoon and a banquet at which the local office was host, was held at the Hotel Carpenter in the evening. The two-day session included addresses by local business men as well as Dayton factory representatives, and was concluded on Tuesday night with a theatre party, at which the manufacturers of the two lines were hosts.

About 125 representatives of the same two organizations from Alabama, Mississippi, and Florida held a similar two-day meeting at Birmingham, Ala., November 2-3.

Impressive Art Treatment Marks G. E. Salon at New York Exposition

The tendency toward unusual artistic effects which characterize General Electric displays in the larger cities is again shown in this beautiful exhibit of Rex Cole, Inc., Metropolitan distributor, at the New York Electrical and Industrial Exposition.

REFRIGERATION FIRST AND RADIO SECOND FOR MAXIMUM PROFITS

Dealer Says Use Radio Only as Side Line

By Edgar H. Felix

Electric refrigeration is often considered as a good side line for a radio business, but it is unusual to regard radio as a side line to electric refrigeration. This distinction is not a mere play upon words; it is the cornerstone upon which a most successful retail refrigeration outlet is built.

Mr. Stanley Stanton, refrigeration dealer of Ridgewood, New Jersey, a prosperous New York suburb, has made an unusually clear analysis of electric refrigeration as a merchandising problem. His conclusion is "put electric refrigeration first at every season and use the winter side lines only to guide you to prospects and profits."

Merchandising under modern competitive conditions requires an even sales curve and profits every month of the year. Radio and refrigeration naturally supplement each other for obvious reasons, but Mr. Stanton does not believe in regarding them upon a basis of equality. Refrigeration should be pushed all year round and sales made every month of the twelve. Neglecting refrigeration for six months in order to push radio is fatal to the building up of a permanent and lasting business. Too much time and sales effort is wasted in picking up lost threads and getting started again with each seasonal change. Only by putting refrigeration first and radio second, no matter what the season, is the maximum profit earned.

Stanton cultivates prospects by direct mail and by house to-house canvass. His display space is well located on the busiest thoroughfare of the community and the refrigerator always occupies the center of the window.

"During the first nine months of operation in this community we sold fifty-five refrigerators, a good start for a new business during its seasonal slump. This summer, I took on a limited, high grade, radio line. I found that the good will cultivated by our sales and service of refrigerators was easily capitalized from the very start of the radio season in selling the type and quality of radio merchandise which I carry.

"My salesmen lost no time in selling radio because none of my refrigerator customers or prospects were called on unless I knew them to be in need of a better and more modern radio set. As this is a very intelligent community, radio went over big when it first came out, so that many of the sets in use can be replaced by the new electric sets. The best and easiest market for the greatly improved radios of this season lies among the owners of sets bought two, three and four years ago. They are readiest to appreciate and understand the improvements in tone quality and convenience that the 1927 radio offers. A high sales efficiency attends our merchandising of radio because our men call only upon the livest kind of prospects and they have, in most cases, won good will by services already rendered.

R. M. Billhimer with Beck & Corbitt, St. Louis

R. M. Billhimer, formerly district sales manager for Copeland Sales Company, Detroit, has recently taken charge of the Copeland electric refrigeration business for Beck & Corbitt, 3010 Locust St., St. Louis, Missouri.

Texas Iroquois Company Increases Capital Stock

Iroquois Electric Refrigerator Company, Inc., Houston, Texas, has increased its capital stock from $5,000 to $20,000, according to an amendment to its charter recently granted at Austin.

FRIGIDAIRE DELCO SOUTH CAROLINA MEN MEET AT COLUMBIA

Frigidaire and Delco Light men met in an all-day session at the Jefferson Hotel, Columbia, S. C., on October 14, in celebration of the second anniversary of the establishment of the Columbia sales branch and its victory over the Ashville sales branch in a national sales contest.

Almost 250 Frigidaire and Delco Light men were in attendance from various portions of the state while a number of prominent Dayton officials were also present for the convention. Among these were H. W. Prior, Delco Frigidaire sales manager; J. A. Harlan, Frigidaire sales manager, and C. C. Whistler, advertising manager. In addition to these, J. B. Reeves, Southern region supervisor; S. R. Prugh, assistant sales manager, Frigidaire, Charles Allen and H. I. Andrews, zone supervisors, were present.

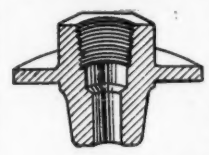
During the day discussions of sales programs and other matters of interest to the Columbia branch were heard. During the afternoon a service school was conducted at the Columbia branch by a Dayton factory representative assisted by V. N. Bise, Columbia service manager.

The meeting was closed with a banquet in the ball room that evening.

G. E. Opens Galveston Shop

Announcement of the opening of an exclusive General Electric refrigeration shop in Galveston, Texas, has been made by Lewis Keller, proprietor of the Service Electric Company of Texas City and Galveston. Headquarters of the Service Electric Company are in Galveston. A staff of salesmen has been employed to introduce the General Electric refrigerator in this section.

HOT DIE PRESSED FORGINGS



Valve bodies, tees, elbows, evaporator headers — anything in the line of brass parts made to your specifications. Rough forgings only. The largest producers of refrigerator forgings in the country.

Send your applications direct to

ROME MFG. COMPANY, Rome N. Y

Factory Representatives:

F. B. Riley and Assciates, 320 Beaubien St., Detroit

REFRIGERATION STAMPINGS

We Specialize in the Design and Manufacture of

ICE CREAM CABINETS

We make them complete or furnish parts separately

Brine Tanks - Cooling Units

Unit Supporting Bases and Perforated Metal Covers

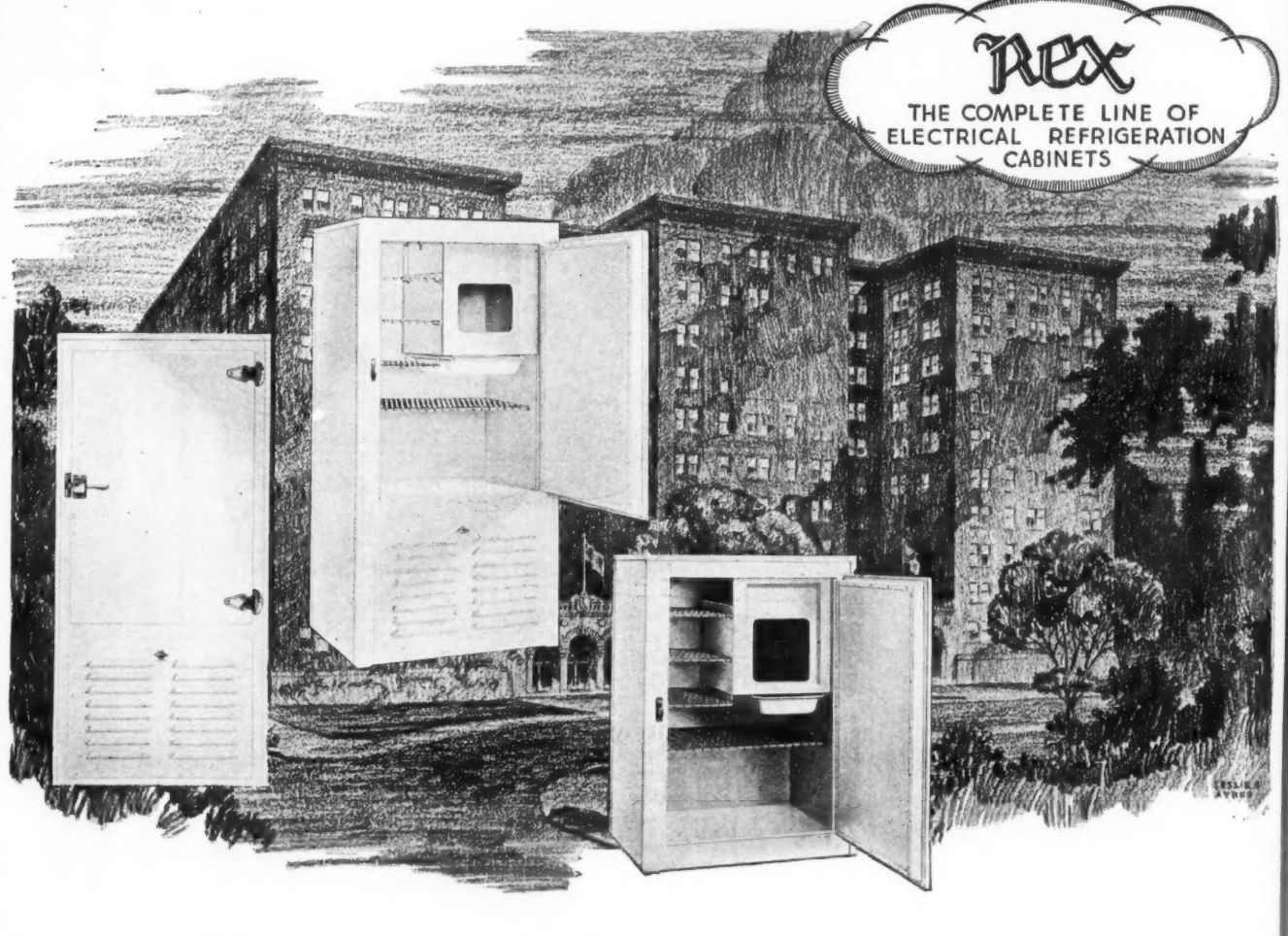
METAL HOUSEHOLD REFRIGERATORS (*Complete*) OR CAN FURNISH OUTSIDE STEEL PANELS, INSIDE LININGS, LOUVERED PANELS, LEGS, ETC., SEPARATELY

We Have a Competent Engineering Staff to Help You - We Solicit Your Inquiries and Specifications

MOTORS METAL MFG. CO. - DETROIT MICHIGAN

Rex

THE COMPLETE LINE OF ELECTRICAL REFRIGERATION CABINETS



REX Cabinets ...for Apartment Houses

The sparkling beauty and the all-metal construction of these unusual cabinets for apartment dwellings make them a valuable asset to the property.

Especially designed to fit exacting requirements and may be had in varying sizes. All standard refrigerating units can be quickly and easily installed. These cabinets may be had with or without compressor space below.

Write for descriptive folder with complete specification charts

Rex

REX MANUFACTURING CO.

CONNERSVILLE, IND., U.S.A.

FINE METAL CABINETS FOR ELECTRICAL REFRIGERATION

SELL RADIOS TO MEN AND REFRIGERATORS TO WOMEN, ADVISES DEALER

National Advertising of Little Value Without Local Tie-up

An Interview by L. F. Pratt

I found Mr. B. in a receptive mood and launched right at the mark from the start.

"And how," I said, "do you find selling electric refrigerators in connection with the radio business."

"I haven't had to sit up nights to figure the day's business," he remarked with a laugh. "But don't get me wrong. There hasn't been anything like a failure. I have big hopes. Lately sales have been better. Simply got away on the wrong foot."

He paused a moment, and I could see a shrewd smile draw away from the corners of his mouth. He was puffing vigorously on a long black cigar. I glanced away for an instant at the single electric refrigerator which stood near.

"You handle one of the most popular makes of the day," I observed. "Surely the name alone should sell a good many in this town."

"That is just the idea I had," said Mr. B. "And it is just that little idea that spells the reason why I haven't sold as many refrigerators this year as I will next. We all live to learn. When I took over a line of electric refrigerators I decided to sign up with a manufacturer of a popular product, that would go a long ways toward selling itself. I figured in this particular community there would be the same percentage of people attracted by the extensive national advertising campaign, carried on by the manufacturers, as there would be in other cities."

His reasoning sounded logical. "And haven't you had your share of good live prospects from this advertising campaign?" I questioned.

"Not by a long ways. At least," he corrected himself, "I have no reason to believe that I have. In fact, I don't feel that I have made half a dozen sales because of this extensive national advertising."

His statement really surprised me, and I said so.

"But it is an actual fact," continued Mr. B. "I don't claim that a big advertising program won't help business. Undoubtedly it may have turned the general trend of the public mind toward my product. However, this line is a bit too young to depend on a name. Prospective buyers, I have found, are more interested in facts concerning the principle of operation. 'Is there anything to get out of order? Is it much bother? Does it require a whole lot of extra service and attention? What do I have to do?' Questions like that constitute the usual approach."

"Don't you think, then," I suggested, "that the product needs the same sort of plugging as electric washers and vacuum cleaners?"

Apparently Mr. B. suspected that I had doubted his personal efforts in merchandising refrigerators. "You think I expected too much without the hard work," he said. "Perhaps I have. But I am frank to admit that selling electric refrigerators does not require a house-to-house campaign. My experience has shown me it is more a matter of concentrated merchandising, show room stuff and that sort of thing. As just another line to handle in this or any other electrical business, it cannot and does not do itself justice. I, at least, have proved it to my own satisfaction."

"Which speaks more conclusively in your favor," I said.

"I'll show you," he went on, warming up to his point, "that I am right. Under a new scheme of things I sold more refrigerators in July than I did through the first six months of the year. And I have only just started to sell along the lines I planned.

"To begin with, the first difficulty I discovered was that each of my two radio stores were men's stores. That is quite natural. Radio is more a man's game than it is a woman's. I found I must reach the ladies. Here at the onset was an arbitrary factor against retailing this line in my stores, until I changed methods. And, by the way, it has been one point that exponents of the house to house campaign have argued, long and loud.

"The more I thought, the more convinced I was that I must do something to bring the attention of the ladies to electric refrigerating. A man, while more or less interested in the idea, would be more easily sold if the lady of the house was interested."

Yonkers Light & Power Holds Special Demonstrations

The Yonkers Electric Light & Power Co., 45 South Broadway, Yonkers, N. Y., recently sent out special invitations to a selected list of prospects inviting them to attend a demonstration to be held at the company's offices on November 9 and 11, from 2 to 5 p. m. The invitations stated that the demonstrations were being held to show how easily delightful frozen desserts could be made in Frigidaire, and also to illustrate how best to use Frigidaire to secure the most beneficial results.

Model Kitchen In Bright Colors Attracts Many Visitors

The model electric kitchen and breakfast nook of the Detroit Edison Co., shown in the photograph above, was one of the most attractive booths displayed at the Million Dollar Exposition and Auto Show held at Royal Oak, Michigan, during the week of October 24. The idea in mind in decorating the booth was to make it colorful. The walls of apricot, the furniture of apple green, the floor covering of green tile linoleum and the colorful dishes in the cupboard all lent charm and attractiveness to the completed display.

However, the real interest in the display was in the electrical equipment which was aptly arranged. The electric refrigerator, the electric range, the electric dishwasher, and the ventilating fan were prominent features, and the ones which were most magnetic in attracting people to the booth. It is estimated that 1,500 people visited the booth during the week.

100 SALES IN SEVEN DAYS MADE AT SHOW IN WANAMAKER STORE

Twelve Manufacturers Display Models

How the John Wanamaker store in New York recently sold more than 100 electric refrigerators during a seven-day show is told in an article which appears in the November 19th issue of the *American Exporter*. The refrigerator show as described was a co-operative affair, with twelve different manufacturers' products being displayed. Addresses were given each day by experts who were nationally known authorities on home economics and electric refrigeration.

No attempt was made at sales until after the lectures were completed. Distributors were allowed to supply their own sales people, with the understanding that there would be no knocking of competitors. Store officials, unknown to the sales people, and some of the many visiting merchants, policed the exhibit to see that the sales people were operating on a fair basis.

The prices of the refrigerators ranged from $210 to $355, with the average sale $305. The report of sales given does not, of course, include the sales which have been made since the close of the display. Neither does the report reveal the number of people who were favorably influenced and who will be in the market for a refrigerator with the coming of spring.

COMMITTEE PROPOSES STOCK FOR CREDITORS OF SERVEL CORPORATION OF INDIANA

It is reported that the committee for creditors of the Servel Corporation has mailed to the creditors of the company a notice that creditors of the Servel Corporation of Indiana, assigning their claims under the reorganization plan of the corporation before the close of business on November 12 would be entitled to receive in accordance with the provisions of this plan upon the consummation of the reorganization, at the rate of $1,000 of their claim first established or admitted, voting trust certificates for three shares of new preferred and seven shares of new common stock.

The committee stated that it believed that this plan treated fairly and protected the interests of the creditors and recommended its prompt acceptance. Assignments of claims to be filled out and returned were forwarded to creditors.

Eastern Distributor Holds Week End Outing at Atlantic City

The Domestic Electric Company, distributor of Frigidaire in New York, New Jersey and Connecticut, recently held its third annual week-end outing for the executives and prize winners of the company, at Atlantic City. the *Boardwalk Illustrated News*, dated October 24, carries photographs of Winston Paul, president of the company; also of E. D. Doty and H. R. Stewart, both of Dayton. Mr. Doty is advertising manager of Frigidaire Corp., and Mr. Stewart is eastern zone manager. Several photos of the assembled group also appeared.

W. L. Towne Joins Tyson Agency

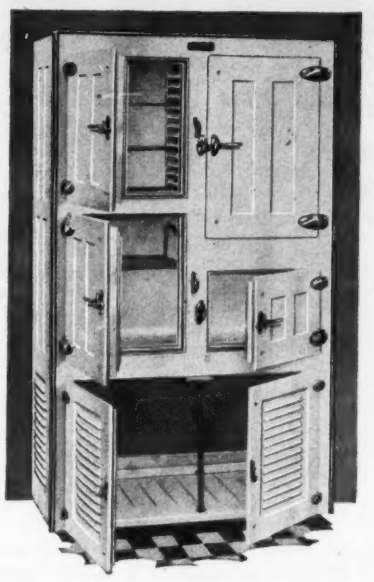
W. L. Towne, formerly with the General Electric Co., in charge of educational advertising, has joined the O. S. Tyson & Company, Inc., New York, advertising agency, as vice-president and member of the board of directors.

Kelvinator-Dow Incorporates

In a list of Florida companies to whom charters have been recently issued, appears the name of Kelvinator-Dow, Inc., Lakeland, to deal in electric motors, refrigerators and dynamos. One hundred and fifty shares of stock at a par value of $100 each are authorized. The board of directors consists of A. L. Dow, W. P. Hayes, and B. P. Hayes.

BOHN SYPHON REFRIGERATORS

Beautiful, Distinctive. Can be had in 7, 9 and 12 cubic foot net food storage capacity.



White Porcelain Enamel inside and outside. The machine compartment is ideal for storage space where remote installation is made.

For Electric Refrigeration

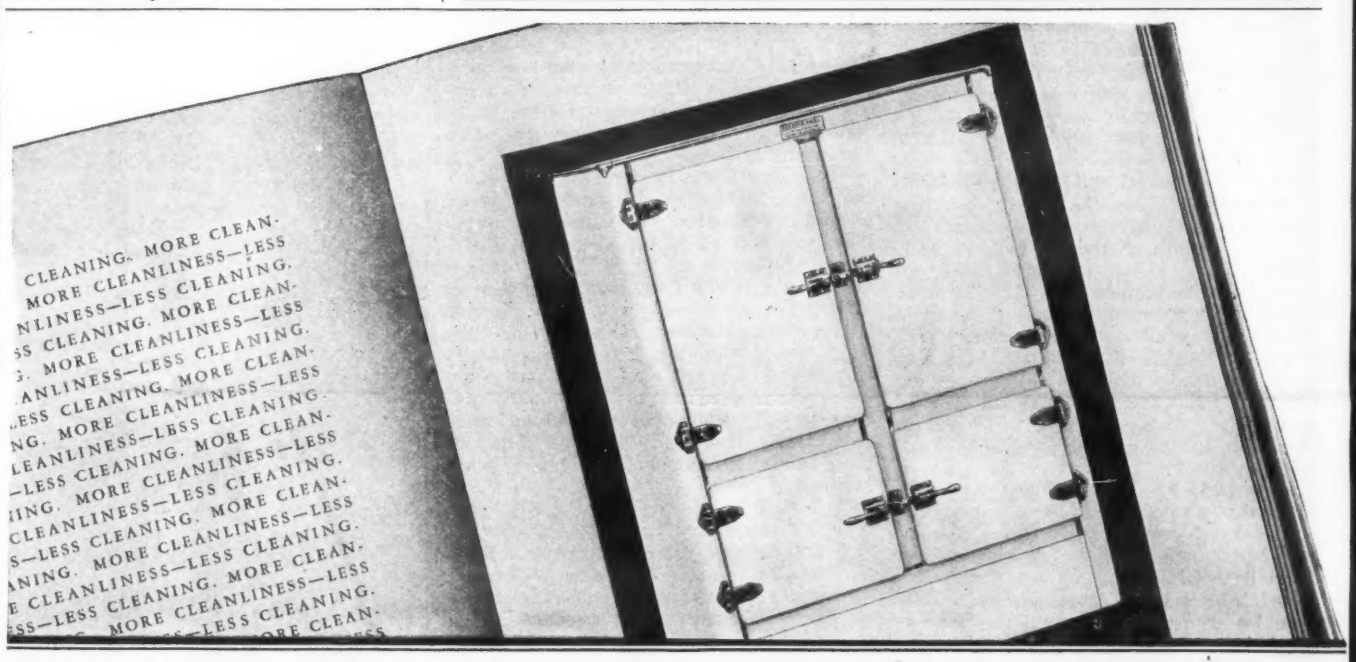
Write for Full Particulars

Bohn Refrigerator Company

SAINT PAUL, MINNESOTA

These Models are on Display at our own Stores in

NEW YORK 5 E. 46th St. | CHICAGO 227 No. Michigan Blvd. | BOSTON 707-709 Boylston St.



QUALITY TRIM DENOTES QUALITY THROUGHOUT

Another Leading Make of Refrigerator Made More Attractive with Monel Metal Trim

SINCE the introduction of electric refrigeration to the general public, box manufacturers have strived to find new ways of improving refrigerator appearance and at the same time increase their cleanability. The best-known makes are Monel Metal trimmed, because:

1 It has a permanently bright, attractive surface—it dresses up the refrigerator

2 Its corrosion-resistance makes it easy to clean and keep clean

3 It is inherently rugged—hard to dent or scratch.

4 It has no coating to wear off.

5 Its permanent ornamental value helps sell the refrigerator.

6 Last but not least! It is available in ample quantities in desired dimensions, shapes and forms.

IMPORTANT: Refrigerator buyers are being taught to recognize a quality refrigerator by its Monel Metal trim. National advertising in general magazines is making Monel Metal trim a talking point of real value.

Monel Metal is a technically controlled Nickel-Copper alloy of high nickel content. It is mined, smelted, refined, rolled and marketed solely by The International Nickel Company. The name "Monel Metal" is a registered trade mark.

INCO MONEL METAL — Monel metal — INCO MONEL METAL

THE INTERNATIONAL NICKEL COMPANY (INC.), 67 WALL STREET, NEW YORK CITY

GETTING SET TO GUIDE THE OIL BURNER STRAIGHT

The Glamor of a New Line Dulls Too Quickly

An Editorial from Electrical World

Now comes the oil burner onto the stage. In the last twenty years the electric flat-iron, the vacuum cleaner, the clothes washer and the refrigerator each in turn has come into the center of the limelight and been acclaimed as the heaven-sent solution of the power companies' need for a broader participation in the home life of the customer and for a larger and more profitable residence load. Each in turn has held the attention of the industry until the new love has appeared. Too often it has been off with the old love immediately. Then instead of fitting the new appliance into the sales appeal with a balanced support for each, there has been a hardening of hearts toward the former favorite. It is to be hoped that this bit of history will not be repeated with the oil burner, and steps are being taken to prevent such a mistake.

After informal contact with representatives of the oil-burner manufacturers' association, the N. E. L. A. merchandising committee has appointed a sub-committee, of which Frank Coupal of Buffalo is chairman, to act jointly with a committee of the Oil Heating Institute in the guidance of both the oil burner and the power industries in their approach to the great home-heating market. For, obviously, guidance is needed if the costly mistakes that have marked the early phases of the promotion of some of the other major appliances are to be avoided. There is work to be done both in the laboratory and in the field.

The comparative qualities of the various types of burners must be studied in connection with hot air, steam and hot-water heating, used both with automatic program control and manually set thermostats. It presents a complex problem, but fortunately the Oil Heating Institute has covered much of the ground, and its data need only to be verified. Then the actual load characteristics of oil-burner equipment must be ascertained, with all the common variables accounted for. Diversity factor, load factor and service requirements must be determined. The economic advantage of an oil burner in contrast with improved coal practice must be defined. And all these facts must be made available with sufficient clarity to make the story plain to ordinary men. The committee has a large and an important job to do, but it will be worth doing.

It would be well before any great national movement starts for the promotion of the "oil burner" by the power industry if a better name for the equipment itself could be established. No one refers to a steam heater as a "coal burner." Why should a term be fastened on this splendid new domestic labor-saving device that automatically suggests expense for the purchase of oil? The committee might well give thought to this.

GET YOUR SODA AND ELECTRIC REFRIGERATOR IN SAME STORE NOW

By Madeline Thomas

It has come to the place where you can buy an ice cream soda and an electric refrigerator in the same store. In New Albany, Indiana, a druggist is a successful agent for the electric refrigerator made by the General Electric Co.

Mr. Conner, of the Conner's Cut Rate Pharmacy, New Albany, believes in the time-honored method of personal contact to stimulate his sales, and though he has only had electric refrigerators a few months, he has already sold a surprising number.

New Albany, being a town of about thirty thousand people, and Mr. Conner's store being in the heart of the business district, he naturally knows personally a large number of the patrons who drop into his store. After he has supplied their wants in drugs, magazines or toilet preparations, he invites them to the back of the store and shows them the good points of his refrigerators. A certain percentage of these people prove interested prospects, and of these he keeps a mailing list. To them he sends a piece of direct mail advertising the refrigerators, every day for four days, enclosing a special letter with the last one. On the fifth day his salesman calls on the prospect to drive home the points that the folders have given. The refrigerators are sold either for cash or on a time basis, as is most convenient to the purchaser.

So far Mr. Conner has only a small display in the back of his store, but is planning to build a special display window, where his refrigerators can be shown to fuller advantage.

"We wish to take this opportunity to compliment you on the publication, which has been of much value and interest to us." —A. C. Unent, Drayer & Hansen Co., Los Angeles.

Excellent Display Near Residential District Getting Good Results in Milwaukee

Three Big Windows on a Corner Location Where Street Cars and Buses Stop Offer Real Opportunities for Selling Displays.

R. R. Sigler, of the Frigidaire Electric Refrigeration Sales Co., 469 Prospect Avenue, Milwaukee, has some very good ideas on display and has three large fine windows in which to work out his ideas. The building is located on the corner of Prospect Avenue and North Avenue, giving the firm two fine approaches on good streets. Both street car and bus lines go directly by this place of business, which means that the window displays are a valuable asset.

Practically every merchant lights his windows at night. So does Mr. Sigler. However, he has worked out a centralized system of lighting that shows up the refrigerators in his window very well. As the store is somewhat on the outskirts of the business district, its lighted windows attract more attention than they would if they were in competition with other retail stores located next to him.

Usually the electric refrigeration dealer attempts to get a downtown location. It took courage to place an agency out in this residential section. However, due to the fact that the most wealthy families in Milwaukee live in this East Side district, the sales of the firm have been very grating. They are close to the selling ground fying. They are close to the selling grounds and get their share of the sales.

The Stover Company, regional distributors, have a downtown store, located at Fifth and Grand Avenue, and the East Side branch, under Mr. Sigler, provides a good coverage for Milwaukee for the Stover Company.

FRIGIDAIRE MAN OPTOMISTIC ON FUTURE SALES IN EUROPE

L. C. Shannon, foreign manager of Frigidaire Corp. and the Delco Light Company, who has recently returned from a month's visit in Europe with other executives of the Frigidaire organization, states that the outlook for Frigidaire business in Europe in 1928 is very bright.

"The new sales record of Frigidaire and Delco-Light abroad, established by our foreign organization during the summer of 1927, warrants us in increasing our European organization in 1928," Mr. Shannon said. "We intended to greatly increase the entire European personnel, this decision having been reached following our first-hand observation of existing conditions. Business in Europe during the past summer has exceeded our most optimistic predictions and attained a unit volume more than double that of 1926." Mr. Shannon visited Paris, London, Berlin, Zurich, Milan and Nice.

"In Italy, the effects of Mussolini's regime is apparent, and business is better and the country more prosperous. Electric refrigeration is beginning to become an accepted factor in the national lives of all of these countries. Especially is this true of England, where we are doing our best business at the present time, and also in Budapest and Vienna, where are our two newest European distributorships.

"The present acceptance of Frigidaire in England came only after a great deal of education by means of advertising and demonstration. The customs of centuries had to be fought and a need for refrigeration created before we could sell Frigidaire. Now that the effects of this campaign is beginning to be felt, Frigidaire is being sold readily to households and commercial enterprises alike. In the commercial field, particularly, are we having satisfactory results.

"The rapid increase of the business in Europe in the past year is an indication of what is happening all over the world, and is merely the forerunner to a decided increase in our activities in the coming year.

"The need for Frigidaire abroad is as great as it is in this country. Our problem is merely one of education. With increased prosperity everywhere, the coming year should see a very great increase of business over the record set up during 1927," Mr. Shannon predicted.

Leonard Making New Apartment Remote Models

The Leonard Refrigerator Company, Grand Rapids, Michigan, has announced a line of apartment refrigerator cabinets for use with electric refrigeration. These cabinets, designed to be placed with their top on a level with the top of the kitchen sink, may be purchased with a vegetable bin for a base. A table top of porcelain may also be had, to be placed on the top of the refrigerator. Their capacities range from 4¾ to 6 cubic ft. They are designed for remote installation.

Servel Moves Western Headquarters to Oakland

Servel Corporation has moved its northern California headquarters from San Francisco to Oakland, and has leased 6,000 feet of floor space at 1631 Poplar Street. About twenty people will be employed. Stock valued at approximately $35,000 will be carried. Victor Wyatt will be manager of the northern California headquarters.

Monmouth Refrigerating Corp. Formed

Announcement was recently made of the formation of the Monmouth Refrigerating Corporation, 220 Broadway, Long Branch, N. J., with capital of $100,000, to manufacture electric refrigerators.

National Standard Votes Down Purchase of E. R. C. Carrier Division

The November 9 issue of this paper carried a statement to the effect that the National Standard Company, with factories at Niles, Michigan, Detroit, and Indianapolis, was contemplating the purchase of the carrier division of the Electric Refrigeration Corporation. At a meeting of the stockholders of the company the proposed increase in authorized capitalization to take care of this purchase was disapproved.

We will install and put into successful operation a complete porcelain enameling plant for porcelain enameling your refrigerator linings and parts at a reasonable price.

Write for estimate.

The Ferro Enamel Supply Co.
CLEVELAND, OHIO

WRITE FOR PROPOSITION

Profits
for
DEALERS - DISTRIBUTORS
Revolvo
and

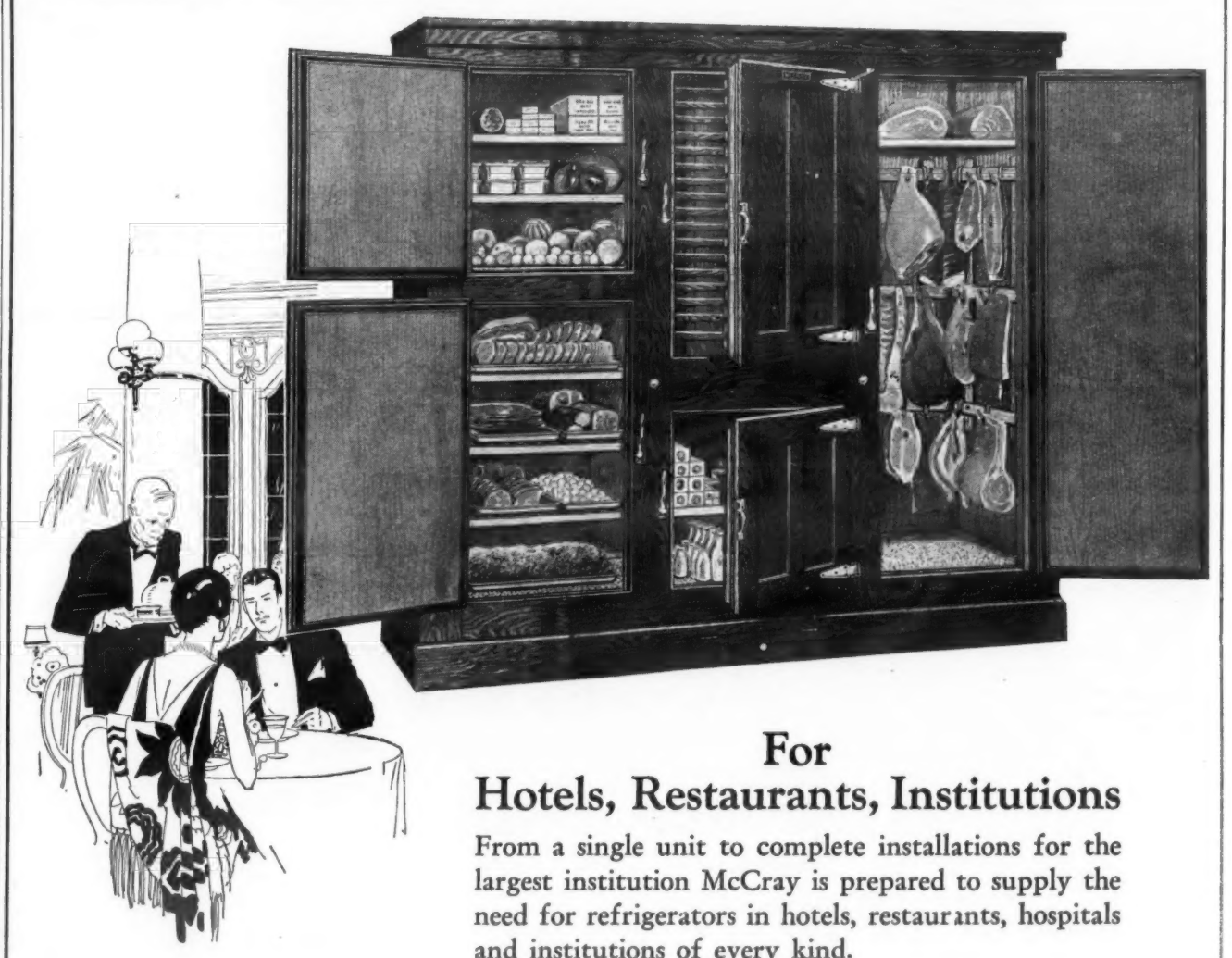
Standard PLYMETL SHELL

One Piece MONOLITHIC CORK

Ice Cream Cabinets
and
Fountainettes

REFRIGERATED WITH THE MACHINE YOU SELL

Iceless Cooler Corp.
225 N. Michigan Ave. CHICAGO, ILL.



For
Hotels, Restaurants, Institutions

From a single unit to complete installations for the largest institution McCray is prepared to supply the need for refrigerators in hotels, restaurants, hospitals and institutions of every kind.

The dealer in electric or mechanical refrigeration of any kind has at his disposal in the McCray line cabinets proved in service for over 37 years.

And the same thorough-going quality marks every McCray product, from a small ice chest to a large cooler, in stock models and built-to-order equipment. The McCray nameplate is recognized as the "sterling" mark on a refrigerator.

Dealers are invited to write for complete information, without obligation.

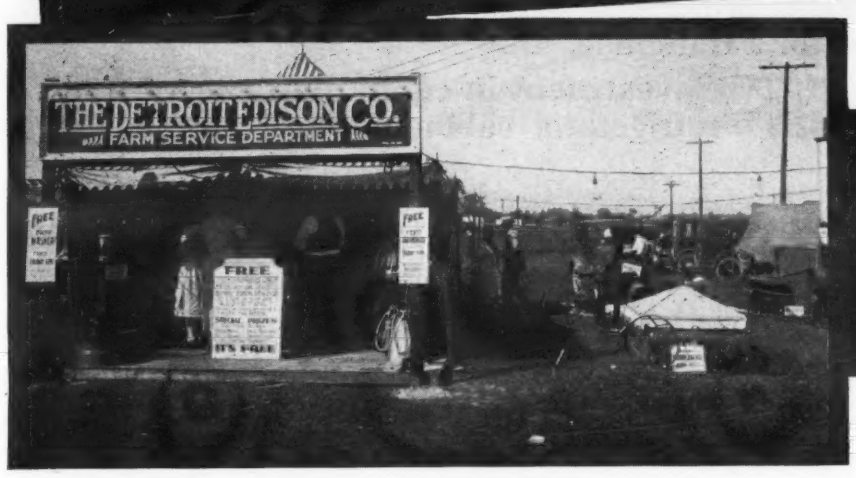
McCRAY REFRIGERATOR SALES CORPORATION
DEPT. 66, KENDALLVILLE, IND.
Salesrooms in All Principal Cities *See Telephone Directory*

A Complete Line of Commercial Refrigerators for Mechanical Refrigeration

McCray is the world's largest builder of refrigerators for all purposes. All McCray models are ready for immediate use with mechanical refrigeration of any type. Refrigerators, coolers, refrigerator counters and chests for stores, markets, hotels, restaurants, hospitals, institutions, florist shops and homes—both stock models and built to order.

Pure cork-board insulation, sealed with hydrolene cement, insures efficient, economical and enduring service.

McCRAY
REFRIGERATORS
for all purposes



Scenes from Detroit Edison Farm Activities

(Upper Left) Four hundred farmers and wives were served a picnic dinner by fifty church ladies from Monroe, Michigan. The photograph shows only two hundred of the guests of the Detroit Edison Company seated at the first table.

(Upper Right) Display of electrified farm equipment in Detroit Edison tent at Imiay City, Michigan, fair. Note the electric refrigerator and milk cooler on extreme left.

(Lower Left) J. H. Flessner, the company's farm representative, explaining the use of equipment displayed at the Northville, Michigan, fair. The big sign headed "Free" offers a feed grinder to visitor whose name is drawn from those registered at the display.

(Lower Right) A part of the same display showing the electrically refrigerated milk cooler.

How Detroit Edison Is Selling Electric Service to the Farmer

Picnic Dinner To Farmers and Wives Introduces and Demonstrates Electric Equipment on Model Farm

The Detroit Edison Company realizes the potential value of the load that rural communities can give to power companies if the people of those communities are only made to realize the convenience and economy of electricity as a helper on the farm. In order to meet the "I'm from Missouri" spirit that is generally met when claims are made for a product, the Detroit Edison Company has co-operated in electrifying a model farm.

Forty-eight miles from the city of Detroit, the Miller farm lies on Dundee Road. The Company made an agreement with the owners to install complete equipment necessary on a fully electrified farm. It is more a demonstration than an experiment — because the experimental stage of farm electrification was passed long ago in the investigations carried on by the farm bureaus and agricultural colleges of the various states, the Grange, and the N. E. L. A. Committee on the Relation of Electricity to Agriculture.

Having electrified the Miller farm, the next step was to demonstrate the equipment to neighboring farmers. Invitations to attend a picnic and exhibition to be held on the Miller farm, Wednesday, October 12th, were sent to Monroe County farmers using Detroit Edison servcie. In spite of an all-day rain, 400 farmers and wives attended—perhaps it was lucky that it did rain, because it would have been impossible to handle a much larger crowd.

Picnic Dinner Served to Farmers and Wives

The picnic dinner was prepared and served by fifty church ladies. Then there was a welcome by W. J. Fitzgerald, district agent, Monroe, in behalf of Mr. and Mrs. Miller and the Detroit Edison Company. Next came a talk by H. J. Gallagher, assistant professor of agriculture at Michigan State College, who reviewed the history of agriculture and made reference to the studies conducted on the experimental electrical farm line near the college and over which he has had personal supervision during the past two years.

Professor Gallagher explained to his farmer friends that the reason more electric lines are not being built through farm districts is because the electric company's revenue from the lines is at present too small to even pay interest on the investment, to say nothing of operating cost. Here, then, he had touched the principal reason for arranging the farm picnic, namely, to increase the farmer's use of electricity by showing him the many farm chores that electricity will economically perform. An important thing to remember is that Detroit Edison rates in rural farm communities are exactly the same as rates charged in thickly populated cities.

After Professor Gallagher's talk, the guests were divided into two groups, one of men and the other of women. The men were conducted around the farm by J. H. Flessner, the Company farm representative, who demonstrated the use of farm machinery. Throughout the demonstrations the farmers uttered ejaculations of surprise to see small electrical motors doing work they always thought required heavy engines. The visitors were particularly enthusiastic over the farm utility motor.

Electric Motor Demonstrates Its Ability

This motor, which was manufactured this year for the first time, is truly the farmer's "man-of-all-work." The motor is mounted on a metal carriage, making it easy to transport. It will operate a circular saw, feed grinder, ensilage cutter, corn husker and shredder, clover seed huller, and even a thrashing machine. It practically supplants the tractor for cold weather use, when the farmer is impatient with the difficulty of starting up a heavy tractor engine. The same electric utility motor was demonstrated driving a corn husking and shredding machine. Many prominent farmers in the vicinity said that a "five-horse motor could never pull that machine." Incubators and brooders received a great deal of attention from those raising chickens, the electrical type being a decided improvement over "mother-hen."

The ladies were addressed by Mrs. Mariquita Dygert and Miss Gretta Watson of the Sales Department, who spoke with intimacy on the foresightedness of convenience outlets, decorative lighting and household labor-saving devices, also giving a demonstration of lamp shade making.

Electric Range and Refrigerator Share Appreciation

The Miller farm residence is equipped with all major electrical household appliances — range, refrigerator, washing machine, ironing machine, electric iron, toaster, fan, sweeper, water pressure system, etc. When Mrs. Miller was asked which appliance she liked best, she answered that it is nip and tuck between electric range and electric refrigerator, but that the water pressure system, providing hot and cold soft water and fresh well water, is not very far down the line.

Miss Edith Wager, of the Michigan Farm Bureau, addressed the audience on behalf of the president of the Michigan Farm Bureau, Mr. N. N. Noon.

As an example of what the farmers may do to load a farm line, a line extension has just been completed, three and one-half miles long, through a farm community where there are already installed six electric ranges, six feed grinders, six water pressure systems and other convenience equipment with an aggregate electrical load which will in four years pay the cost of installing the line. This line was built without cost to the farmers because the estimated use of Detroit Edison service justified the company making the investment.

With the extension of these lines the farmer becomes a prospect for the appliances which were before largely limited to city sale. The electric refrigerator salesman will find valuable prospects along these extensions of electric service.

REFRIGERATION PLAYS IMPORTANT ROLE IN NEW MOVIE RELEASES

Fox Company Finds Saving In Good Refrigeration

The Fox Company, San Antonio, Texas, long established in the city made famous by the historic Alamo, is at the present time completing one of the largest and most modern buildings devoted exclusively to the art of photographic developing in the world.

Before plans for their new plant were completed, they sent a representative to the most progressive and modern photo developers of the north and east. From the great number of ideas this trip suggested, he decided that electric refrigeration was of paramount importance. This conclusion he said was easily reached after he had seen what a great convenience it was to have constant temperatures, automatically maintained, in the various liquids at all times, and further, it would mean considerable saving.

It was a plan of this representative to purchase several small Kelvinator portable water coolers also, any one of which could be easily connected at one of many water outlets throughout the plant at any time, thus eliminating the necessity of employees going several feet to a fountain. This plan was deemed necessary because of the frequent rearranging of the various operations, when time and practice showed such a move to be advantageous for greater efficiency; these changes being caused by fluctuations that such a business will experience from season to season.

San Antonio has recently been the scene of action for some of our foremost moving picture concerns. Several scenes from "The Rough Riders," "The Big Parade," and "Wings" (the newest big success of moviedom), were taken in the country surrounding the City of the Alamo. The Fox Company did considerable of the developing work on the films for these and many other productions, thereby establishing a national reputation with the cinema producers. No doubt in the future we will see many wonderful productions of the silver screen made clear and successful by contented workers and proper temperated developing solutions, all made better by electric refrigeration.

Subscribe to Electric Refrigeration News now. Use coupon on Page 16.

DECORATIVE FINISHES
for Refrigerators

THE new mode requires beauty and harmony in kitchen decoration. The finishing room is therefore becoming more and more important to the manufacturer of refrigerators.

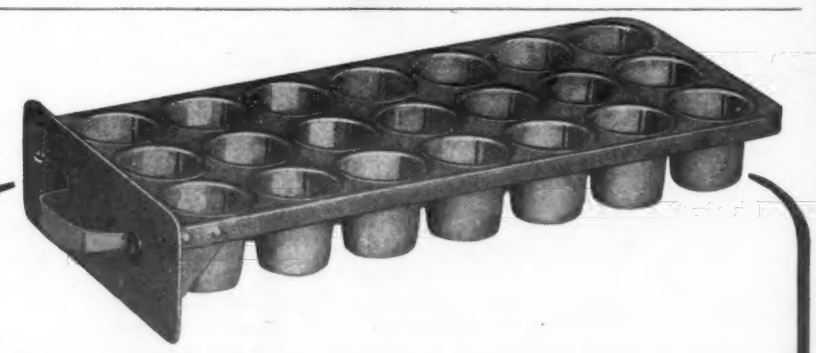
Our studio is prepared to work with you in the creation of unusual design and skillful color combinations. This service is offered without charge and has proved to be immensely valuable to progressive manufacturers.

BRADLEY-HURTZ COMPANY

Successors Industrial Division Bradley & Vrooman Co.

2626 S. DEARBORN ST. CHICAGO, ILLINOIS

ENAMELS LACQUERS VARNISHES PAINTS INDUSTRIAL



Better Stampings —
at less than you can make them

The G. P. & F. Plant is equipped more completely for producing stampings than any manufacturer of one line can afford to be. With 47 years experience behind them, G. P. & F. Engineers offer ability in design and production methods seldom for sale on the open market.

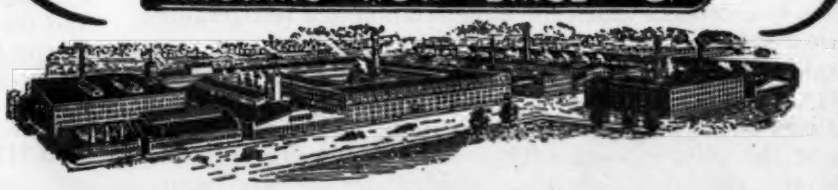
Just two reasons why many manufacturers are saving the investment necessary for a stamping department—making G. P. & F. entirely responsible for various pressed and stamped parts.

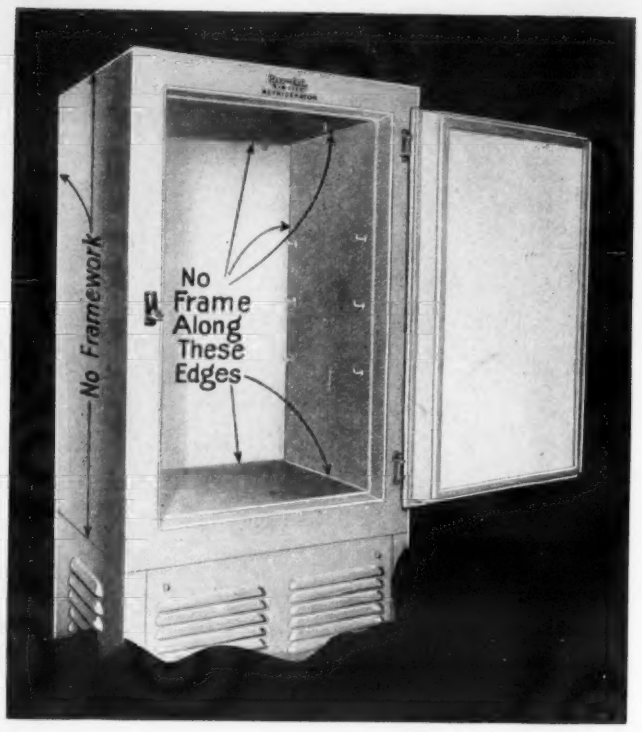
Send for the booklet "Stampings"

GEUDER, PAESCHKE & FREY COMPANY

Sales Representatives in principal cities in all parts of the country
1366 St. Paul Avenue, Milwaukee, Wis.
345 W. Ohio Street, Chicago

G.P.&F. SERVICE
"KNOWING HOW SINCE '81"





Millions Now Wa of Refrigerators Nation-Wide System PLYMETL RE

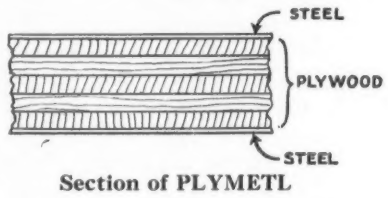
Capital is invited to investigate thoroughly this assembly plant proposition with a view to becoming a part of this nation-wide system.

Any concern or group of men who can prove that it possesses the necessary working capital is invited to correspond with us for a franchise.

An assembly plant with less than $10,000 investment in equipment can turn out half a million dollars a year worth of PLYMETL refrigerator cabinets, made possible because

PLYMETL Refrigerator Cabinets *with* Vitrolite Linings and Monolithic Cork Insulation

PLYMETL is made by cementing zinc coated sheet steel to the two faces of a plywood panel. It is comparatively light in weight, and yet very stiff and strong. Plymetl used most in refrigerator construction has the weight of steel about 1/15 inch thick, but it is about four time sas stiff as $\frac{3}{16}$ inch boiler plate.



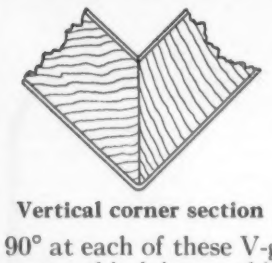
Section of PLYMETL

DOORS: While stiffness is important for the walls of a refrigerator, it is much more important for the door panel. The door not only needs to fit when the cabinet is new, but it needs to keep its shape throughout the life of the refrigerator. The Plymetl door panel is completely encased in steel; the faces overlap each other at the edges of the panel, and they are soldered together. Such construction eliminates all warping of doors.

FRAMEWORK: Plymetl forms a self-supporting shell, which needs no supporting framework. The only framework used in a Plymetl cabinet is that around the door opening—four pieces instead of twelve.

The eight edges, in which the Plymetl refrigerator uses no framework, are filled full of cork insulation. Cork is three times as good an insulator as wood. Cutting out wood framework and substituting cork improves the insulation, and decreases the monthly bill for power.

Wood frames are commonly fastened together by means of nails or screws, driven in the general direction of the flow of heat. Steel conducts heat about 1000 times as well as cork, and a few nails or screws may make quite a difference in the monthly bill.


Vertical corner section

PLYMETL JOINTS: The four vertical walls of a refrigerator, viz., the front, the back, and the two sides, are all made from a single panel of Plymetl. This panel contains four V-grooves which do not cut the outer steel face. To form the four walls of the refrigerator, the panel is folded 90° at each of these V-grooves. The steel face is continuous across this joint, making the best possible connection, and without the use of nails or screws.

The two vertical edges of this panel meet at the back of the cabinet in joint, where the edges of the steel face are turned in, and soldered together.

This large shell panel has a ledge along its upper edge, and another along its lower edge. The Plymetl panels which form the top and bottom of the cabinet, fit into these ledges. The edges of the steel faces are turned into these joints and soldered.

METAL TRIM is not used on Plymetl refrigerators. Of course, it can be used on a Plymetl refrigerator as well as upon any other, if anyone wants it. But no one seems to want it on this refrigerator.

The Plymetl refrigerator has perfect joints, which do not need to be concealed.

In the Plymetl refrigerator, the joints are smooth. They offer no obstruction in cleaning. They have no crevices wherein disease breeding filth may find lodgment.

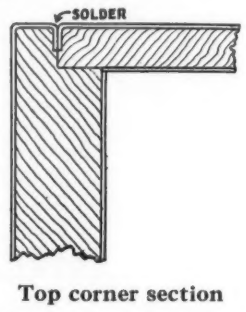
The plain Plymetl design contains the elements of genuine beauty and genuine worth.

Perhaps the slogan that "High grade metal trim indicates high quality throughout" is somewhat misleading. It might be more nearly correct to say that gaudiness bears to excellence much the same relation in a refrigerator as it does in a woman's hat.

CONDENSATION WITHIN THE INSULATION CHAMBER: A pitcher of ice-water on a summer's day collects drops of water on its exterior. This is not because the pitcher leaks. This condensation comes from the air, not from the water inside. People who wear glasses find that moisture collects on their glasses, if they enter a cafeteria on a cold winter's day. This condensation comes from the moist air of the cafeteria. In cleaning his glasses, one often holds them in front of his mouth and gently breathes on them and they become coated with moisture, condensed from his moist breath. In each of these cases relatively moist air comes in contact with a surface at lower temperature.

The air of a kitchen is commonly moist. The interior of a refrigerator is cold. If it is poorly insulated, the exterior of the refrigerator will be cold enough to collect moisture from the air; and under favorable circumstances such exterior condensation will form on a well insulated refrigerator. But this exterior condensation does not damage the refrigerator. It is an unseen condensation which collects within the insulation chamber which is harmful and needs to be prevented; it wets the insulation, impairs its insulating properties, and gives rise to bacterial growths which are highly objectionable.

This interior condensation comes from the moist air of the kitchen, which passes through imperfect joints in the exterior casing of the refrigerator, and circulates in the cooler insulation chamber. Here a portion of its moisture is condensed, in just the same way that condensation forms on the outside of a pitcher of ice-water.



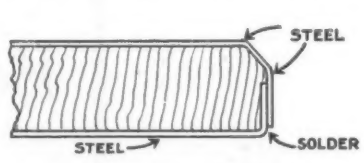
Top corner section

The Plymetl refrigerator has an exterior which is completely sealed by means of zinc coated steel, all of whose joints are fully soldered. This complete and perfect exterior seal is a new departure in refrigerator design.

This interior condensation is not a new problem in refrigerator design. Attempts have been made to control it by inclosing the insulation in waxed paper and by other means. But such a seal is hidden. After the refrigerator has been assembled, one cannot examine the seal to see that it has been properly constructed; and he cannot examine it from year to year, to make sure that it is still effective.

VITROLITE LINING: Vitrolite is the highest class material used for refrigerator linings. In recent years its use has been confined mostly to large high-priced refrigerators. It is not affected, or even discolored, by any material which is likely to be placed in a refrigerator.

MONOLITHIC CORK is so called because it is cast as a single block. It consists of a mixture of coarse and fine grades of dry regranulated cork together with a binder which does not absorb water. The material, heated to a high temperature, is tamped into the insulation spaces of a refrigerator, and becomes a solid mass on cooling. It completely fills these spaces and cannot settle.



Door Section

Monolithic cork weighs from ten to eleven pounds per cubic foot. Tests show that its insulating value is substantially the same as a good grade of corkboard of the same thickness. Inasmuch as this is a new material, and not particularly expensive, we commonly make monolithic cork insulation somewhat thicker than the corkboard which it replaces. Thus, where corkboard 2 inches thick is to be replaced by monolithic cork, we normally make the thickness 2¼ inches, except on the doors. Doors become awkward if excessively thick.

We believe it advisable to make the insulation below the bottom of the lining somewhat thicker than that of the walls. The lower part of the food compartment has an interior temperature somewhat lower than that of the sides. If the refrigerating machine is installed in the base of the cabinet, the temperature just below the food compartment will average somewhat higher than that outside the walls. And the air circulation below the bottom will average much greater than elsewhere. There are thus three circumstances which point to an unusual flow of heat through the insulation of the bottom of the food compartment, unless its thickness is increased.

MACHINE BASE The Plymetl food compartment stands upon and is bolted to, a machine base made of sheet steel, spot welded together.

PLYMETL "Air-Tite" Refriger Ca any form of electrical cooling unit, t is plants to supply cabinets to all ele l u dealers.

Our plan presupposes the shi o down Shell fabricated ready for ass .

A car that would hold 40 fair-siz rig loaded with upwards of 250 Knock wn

PLYMETL Refrigerator Assem lan on this saving of crating and freight

A nation-wide system of PLY R is now being established for doing ss

We have spent a fortune during the e y PLYMETL Refrigerator construction sim it is the only refrigerator construction tha apta was created for this particular purpose.

The Knocked-Down PLYMETL Ref or under straight line production methods in lar

No "bugs" to iron out. It is an absol tain shipped and put into use this year without e cl

The PLYMETL panels, the PLYMET bine chinery are covered by many patents. The ss is no charge for the franchise, except to requ leas incorporation of a PLYMETL Refrigerato pany sale of PLYMETL.

Our Grand Rapids factory has a produ apac frigerator Shells a day.

We charge no royalty for our patent p of n in our PLYMETL Shells.

The reason that HASKELITE MANU TUR operate these stations or plants itself is be of th management is not as efficient as privately d ma ly interested in selling PLYMETL panels

National Selli ganiz

A plan has been devised for national a ing with the various plants on a co-operative b Full ticulars regarding the franchise arrangem ll be

PLY D HAS E PLY L

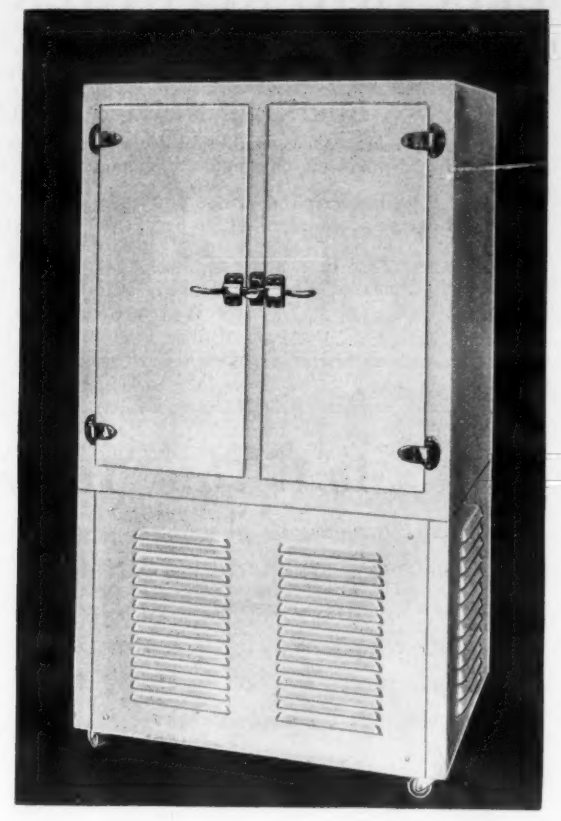
Geo. R. Meye Pr

Haskelite Manufac rin

133 West Wa ton

CHI O

...ated in Distribution ... be Conserved by ...f Assembly Plants for ...RIGERATORS



the PLYMETL cabinet is peculiarly adaptable to knock-down shipment and local assembly.

Franchises for PLYMETL Refrigerator Companies for the districts of Chicago, New York City, New Jersey, Philadelphia, and Albany are closed.

Franchises for PLYMETL Refrigerator Assembly Plants are open for the principal cities in foreign countries and for the cities in the United States listed below.

...rige... Cabinets are designed to take ...nit, ...t is the purpose of the assembly ...l ele... unit manufacturers and their

...shi... of the PLYMETL Knocked- ...ass...

...r-siz... rigerator cabinets **set up** can be ...nock...wn PLYMETL Shells.

...sem...lants can be operated at a profit ...eight

...LYM... Refrigerator Assembly Plants ...ng t...ssembly work.

...the l...e years perfecting a Knocked-Down ...on t...simple, rapid, flexible, and economical; ...n tha...aptable to the assembly plant idea. It ...

... Refr...or construction is ideal for assembly ...ds in... large or small quantities.

...absol...tainty. Three thousand cabinets were ...hout...e claim for rebates or allowances.

...MET...binet, and the special fabricating ma- ... The...ss is absolutely fool-proof. We make ... requ...least $30,000 working capital and the ...erato...pany. Our only profit comes from the

...rodu...apacity of over **1,000** PLYMETL Re-

...ent p...of making Monolithic Cork when used

...AN...TURING CORPORATION does not ...is be...f the well established fact that branch ...ately...d management. HASKELITE is sole- ...anels

Selli...ganization

...nal a...ing and selling with control resting ...ive b... Full details of this plan, as well as par- ...agem...ll be gladly furnished.

...LY...D ...AS...TE ...LY...TL

...eye... President

...fac...ring Corporation

...Wa...ton Street

...CHI...O

$6,000,000 to $9,000,000 Being Wasted

Assuming 500,000 Household Electric Refrigerators Sold During 1927 Complete with Cabinets

HOW THE MONEY WAS WASTED!

500,000 Crates at Average Cost $4.00	$2,000,000
Freight on 500,000 Refrigerators at Average, $8.00 (C. L. and L. C. L.)	4,000,000
Cartage and Handling from Railroad to Warehouses, 500,000 at $1.00	500,000
Damage in Transit, 500,000 at $1.00 to $3.00	500,000
	$7,000,000
Less Average $2.00 Freight Charge Distributing Knocked-Down Plymetl	1,000,000
Minimum Loss to Industry by Economic Waste	$6,000,000

WHAT'S THE CURE?

The Plymetl "Air-Tite" Knocked-Down Cabinet Assembly Plan, which Eliminates Every Dollar of the above Economic Waste

Franchises Open in Foreign Countries and for the Following Cities:

Baltimore, Md.
Birmingham, Ala.
Boston, Mass.
Buffalo, N. Y.
Chattanooga, Tenn.
Cincinnati, Ohio
Cleveland, Ohio
Columbus, Ohio
Dallas, Texas
Denver, Colo.
Des Moines, Ia.
Detroit, Mich.
Houston, Texas
Indianapolis, Ind.
Jacksonville, Fla.
Kansas City, Mo.
Los Angeles, Calif.
Louisville, Ky.
Memphis, Tenn.
Milwaukee, Wis.
Minneapolis and St. Paul, Minn.
Montreal, Canada
New Orleans, La.
Oakland and San Francisco, Cal.
Omaha, Nebr.
Pittsburgh, Pa.
Portland, Ore.
Richmond, Va.
Rochester, N. Y.
St. Louis, Mo.
San Antonio, Texas
San Diego, Cal.
Seattle, Wash.
Spokane, Wash.
Salt Lake City, Utah
Toledo, Ohio
Vancouver, Canada
Washington, D. C.
Winnipeg, Canada
Worcester, Mass.

Superiority of the Cabinet Over Any Other

Air-Tight Exterior Walls.

No Moulding Needed to Hide Open Joints.

Outside Air Cannot Enter Cork Wall Chamber to Condense and Cause Vermin Infection.

Doors are fool-proof; have the stiffness of $\frac{3}{16}$" boiler plate; will not warp; heat leakage around doors reduced to a minimum.

Wood entirely eliminated for structural frame-work, assuring increased insulation.

Highest grade lining—Vitrolite, proof to all acids except hydrofluoric.

Top of lining made of Plymetl to support brine tank, a fool-proof support.

Monolithic cork cast in place, giving uniform cushioning support and superior insulation, free from joints.

Machine base of sheet steel, assembled by spot welding.

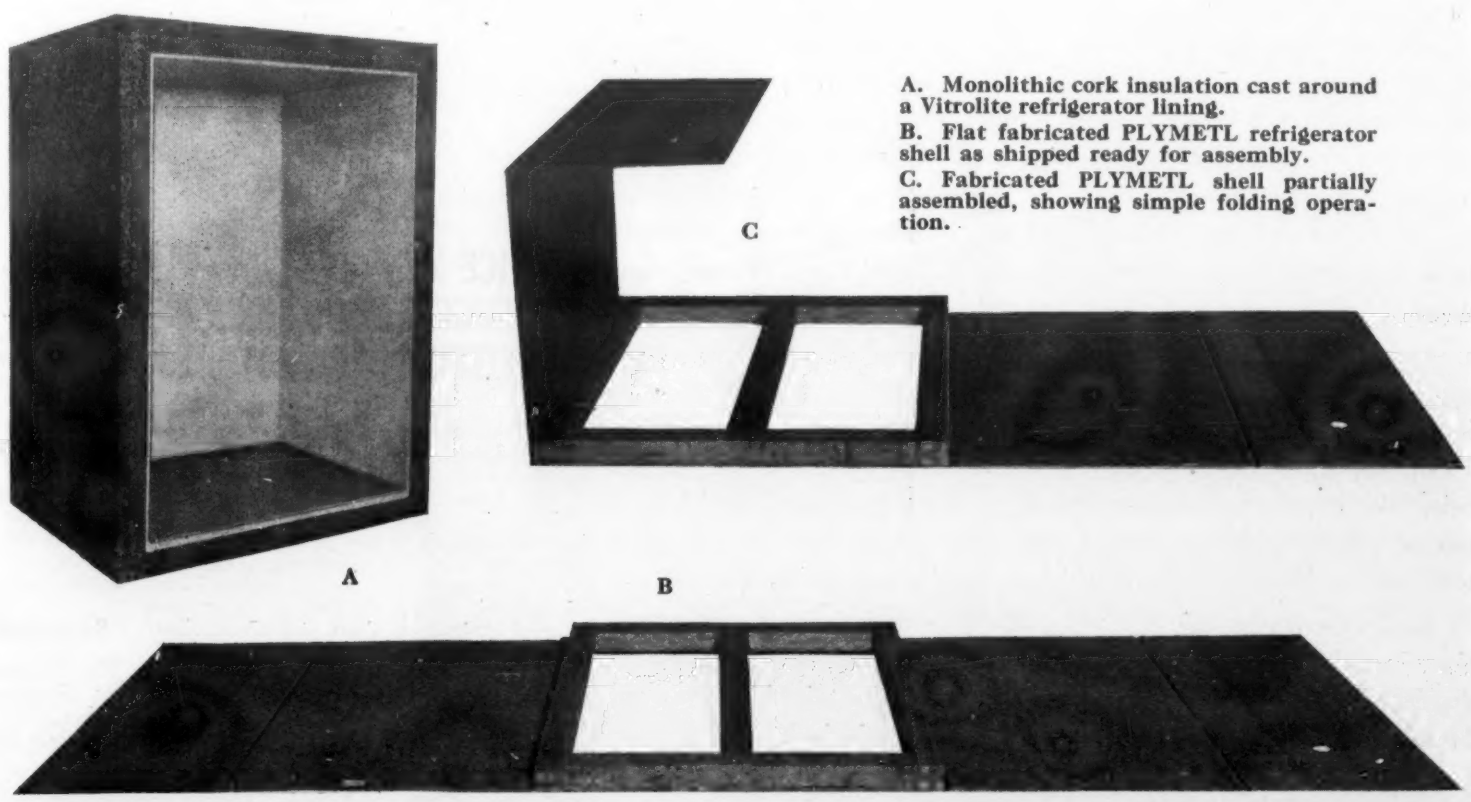
Stretcher Leveled Vapo Metal used throughout—no rust problem.

Adjustable shelf supports suspended from the top, giving unobstructed lining walls—perfectly sanitary, easily cleaned.

No nails or screws leading from exterior toward interior of cabinet, greatly reducing heat leakage.

Air-tight construction, eliminating breathing of the cabinet.

Perfect finishing surface.



A. Monolithic cork insulation cast around a Vitrolite refrigerator lining.
B. Flat fabricated PLYMETL refrigerator shell as shipped ready for assembly.
C. Fabricated PLYMETL shell partially assembled, showing simple folding operation.

ELECTRIC REFRIGERATION NEWS

The Business Newspaper of the Electric Refrigeration Industry

PUBLISHED EVERY TWO WEEKS BY

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NOVEMBER 23, 1927

Is It Time To Organize?

Renewed interest in an industry organization has lately been expressed by a number of manufacturing executives. During the past year it has often been apparent that the electric refrigeration industry is working at a disadvantage because of the lack of an acceptable association through which the manufacturers may act in considering matters of mutual interest. At present, there is no elected representative with authority to speak for the group. Governmental departments, engineering societies, and trade associations desiring to assist or cooperate with the electric refrigeration industry have been unable to deal with the manufacturers in an efficient and official manner.

ELECTRIC REFRIGERATION NEWS has been actively conscious of this situation and has been ready and willing to use its influence to advance any sound plan for which there are reasonable hopes of success. It has been suggested on several occasions that the NEWS should point out the need for a common meeting-ground and take the leadership in bringing the interested parties together. We have had in mind, however, that the first effort in this direction, launched some two years ago with high hopes and under the guidance of an able and experienced veteran in cooperative work, failed to achieve its purpose. It has seemed wise to wait until the industry showed signs of a willingness to meet its problems collectively rather than individually.

Conditions Which Stimulate Cooperation

Fear is said to be the strongest incentive to bring men together in a plan of cooperation. A nation at war demonstrates this primary principle. There are strong organizations in present-day business which had their origin at a time when the industry was threatened by some real or fancied danger. Only a crisis would have caused rival executives of the old school, who gloried in their hatred of each other, to meet in the same room.

If fear is the greatest stimulant to cooperation, then it is also the easiest condition under which a group movement may be launched. No deep thought is required to bring men together when an enemy is pounding at the gates. The besieged will follow any courageous leader who steps forward to challenge the invader.

Real statesmanship is required to organize a people into a constructive movement in times of peace and prosperity. It is even more difficult to arouse interest in a forward-looking program when leaders are so intent upon their own ambitious plans to thwart each other that they have no time to think of mutual welfare.

The Electric Refrigeration Council

Various reasons have been given for the decline of the Electric Refrigeration Council—the most obvious being the withdrawal of one of the six company-members. There must have been something lacking, however, to cause this company to refuse to participate further, and there must have been some weakness in the plan if the others failed to see sufficient advantage in continuing their relations. The founder of the organization made no claim that it was perfect and was outspoken in his belief that time and experience alone would permit the development of an effective plan. Knowing the difficulties of bringing together competitors of long standing, he proposed that the executives and department heads get acquainted and learn to know each other personally before the antagonisms and prejudices incident to competition had time to take root. Many friendships were developed between individuals as a result of the meetings held, and in many cases departmental cooperation between companies has continued unofficially.

One charge against the Council was that of exclusiveness. To some it appeared to be an effort to establish an inside circle—an aristocracy of the industry. In theory, the original plan had certain practical advantages. First, four companies were represented, then five and then six—the idea being that a small group can agree more readily than a larger assembly. If this procedure had been continued and a new member added at each quarterly meeting, there probably would have been no complaint.

Under present conditions it will probably be agreed that a new association must throw the doors open at once to all companies in the business, depending upon an adopted constitution to determine eligibility for membership. Views and comments on the situation are invited.

POWER COMPANY TO MAKE SURVEY OF TEXAS FARMS

25 Farms of Various Types Selected for Tests

A number of Texas power companies are conducting an experimental campaign to extend the use of electrical energy to various kinds of agricultural operations. In co-operation with the Texas Agricultural and Mechanical College, the power companies have selected twenty-five farms where experiments concerning farm electrification will be carried on for a three-year period. A careful survey of hundreds of farms throughout Texas was made by a committee representing the power companies and the College before the farms were selected.

The twenty-five farms are divided into several different classes in order that the electrical requirements of the various types can be studied to best advantage. Eight will be devoted to growing cotton, five to dairying, five to poultry raising, two to growing garden produce, two to raising grain and three to general farming.

All installation of equipment is to be made by the power companies, which will also detail a man to make readings of the instruments installed. Suitable signs are to be erected on roads approaching the experimental farms to inform the public of what is being attempted by the two groups.

Information will be gained such as the most desirable size of transformer for farm service, whether present electric ranges are suitable for farm use, the amount of kilowatt hours used by various kinds of electrical equipment on the farm, and the maximum demand for each farm and the line efficiency.

It is hoped that a survey can be made to find out just what percentage of their incomes present users are spending for electricity and the maximum amount to be expected from Texas farms of various types.

GIVES OPPORTUNITIES AND ARGUMENTS FOR PUSHING WINTER SALES

Refrigeration Service Should Be On Same Basis as Auto

W. C. Gibson, president of the Champion Sales Corporation, Chicago, says there are two reasons why refrigeration should be pushed in winter:

1. "Prospects can be found in their homes or places of business any day of the winter.

2. "Prospects are thinking about some home conveniences during the period of the year in which they stay home." These reasons appeared in *Electrical Merchandising* for November under the heading "To Sell Refrigeration in Winter." He continues with the following arguments successfully used by his salesmen in selling refrigeration in winter:

Food preservation—Rarely are there more than a dozen days from November to March when the temperature outside is suitable for the "cold box" method of keeping foods fresh. The balance of the time the worst possible conditions prevail, namely, alternate freezing and thawing.

All year 'round use—Without exception those who have electric refrigeration use it the year 'round. There must be a mighty good reason. There is—it's the only way foods can be properly preserved.

Preparedness—Buy now and enjoy this modern convenience and avoid also the possibility of delay in filling your order during the May to July rush.

Another statement made by Mr. Gibson which will be of interest to salesmen is that:

"If a salesman will put in the same amount of time pushing refrigerators from November to March that he does from April to October he will now be able, because of the growth of public acceptance of this appliance, to earn a more than satisfying salary."

SERVICE MEN GIVE SUGGESTIONS FOR CUTTING EXPENDITURES

Realizing that the purchaser of an electric refrigerator buys the machine because of the service he expects to receive from it, the Commonwealth Edison Company of Chicago, has taken particular care in seeing that machines are properly installed and properly serviced according to an article which appeared in the November issue of *Electric Light & Power* under the heading, "Cuttings Costs and Complaints in Refrigeration Installation and Service."

According to the writers, G. D. Witherbee and W. T. Peace, "service calls are due to one or more of these causes: defective material, defective installation, or workmanship; improper application; improper attention on a previous service call; worn out parts; rough treatment by the user; electrical trouble or misconception of 'proper operation' by the purchaser."

While the dealer should expect that each machine will be in perfect condition, there are bound to be a few which will arrive in defective condition due to rough handling in transit, according to the writers. Because of this fact the machines should be checked carefully to see that the product delivered to the user is perfect. In regard to installations where the machine is installed in the base of the refrigerator the completely assembled job should be put in operation and checked for at least two days in the dealer's shop before delivery to the customer. This more nearly insures perfect operation of the unit in the home. In the remote installation care should be exercised to see that there is no more dirt and nuisance than is absolutely necessary. Particular care should be taken in this type of installation to see that all traces of moisture are pumped out of the system. It is also stated that no man should be allowed to install a machine until he has acted as a helper for at least two months and proved himself capable.

At times the service man will come across installations which have not been properly specified and where the refrigerating equipment is too small to handle the job. In cases of this kind the owners should be advised and either the equipment removed and the money refunded or proper size installed.

Service Man of High Type

In regard to the type of man best fitted for service work, the writers express this opinion: "An electric refrigeration service man must be of a higher type than the average. Before making a repair he must correctly diagnose the trouble, if Mr. Consumer is not to phone again tomorrow. To service refrigerating machinery properly, a man *must* understand what is happening inside the coils and compressor, what changes take place, what different pressures and indications mean. Otherwise he may replace a float when a discharge valve is leaking."

In concluding the article with the subject of service costs the thought is brought out that where service on an automobile which operates only a fraction of as much time as an electric refrigerator, will run to $100 a year, and while a piano kept in proper tune costs $8 to $10 a year, many owners of electric refrigerators resent even infrequent small bills for service.

"Instead of leading the public to believe that a machine will run for years without attention, people should be educated to appreciate the wonderful service they are receiving at such small maintenance expense."

Savannah Power Adds G. E.

The Savannah Electric & Power Company, Savannah, Georgia, announces the addition of the General Electric refrigerator to their line of appliances.

Something Different—Atlantic City Beauty in Domestic Attire

This attractive young lady is not an Atlantic City beauty contest winner. She's just one of the girls in the General Electric National Exhibit, 1400 Boardwalk, Atlantic City, and has as one of her duties the changing of food displays—hence the photo above.

HOW SAN ANTONIO CENTRAL STATION HELPS APPLIANCE MEN

The old problem of the central station, namely, to sell appliances or not to sell them, is considered by Ruel McDaniel in the October 29 issue of *Electrical World*, using the San Antonio Public Service Co. as an example. In his description of the San Antonio company's method, which appears under the heading, "If You Don't Sell Appliances," Mr. McDaniel tells how the company has worked out a plan to meet the situation.

The San Antonio Public Service Co. does not sell appliances, but instead devotes its efforts to helping the appliance dealers to merchandise their different lines. The company has two large window displays, well located, which are placed at the disposal of the appliance dealers in the city. The local organization of appliance dealers and contractors arranges for its members to use these two windows at times which are determined by lot.

Every effort is made by the power company to help the dealer in arranging his display. The company also keeps a salesman on the floor to explain the details of the various appliances and to make sales. Where the article is not too large, the delivery will also be made; however, in the case of appliances such as an electric refrigerator or washing machine, the dealer makes his own delivery.

In addition to the display and selling service, the company also runs newspaper advertising on the different appliances, which include the name of the dealer who handles them. According to the writer, this plan has worked out very well and has converted knockers into boosters.

ICE MANUFACTURERS WILL SPEND $300,000 FOR 1928 ADVERTISING

The proposal made by the committee on national educational publicity of the National Association of Ice Industries that the organization spend $300,000 on publicity in 1928, was ratified at the tenth annual convention of the association held at the Biltmore Hotel in Atlanta, Georgia, November 1-4.

The report of the committee, which met in Chicago on September 23, was given in some detail in the October 26 issue of this paper. The budget which has been set aside for the coming year is greater by $100,000 than that which was available for 1927. At the Atlanta convention J. E. Muckermann of St. Louis was re-elected president of the National Association of Ice Industries.

TEST ELECTRICALLY REFRIGERATED ICE CREAM TRUCK BODIES

Power Supplied By Farm Lighting Plant and Storage Battery

The adaptability of electric refrigeration to ice cream truck bodies is the subject of a descriptive article by A. C. Smith and L. J. Darmstadt appearing in the November issue of *Refrigerating Engineering* and abstracted from a thesis submitted at the Massachusetts Institute of Technology in the mechanical engineering department. According to this article the main interest of the ice cream manufacturer in turning to electric refrigerated trucks for the shipment of ice cream is in the hope of decreasing truck and body depreciation by eliminating salt and ice, the possibility of providing a refrigerator body of lighter weight, and the capitalization of the widespread interest in mechanical refrigeration.

According to the authors the sources of energy to be supplied to refrigerating equipment are:

1. "Mechanical power taken directly from the truck engine or drive shaft.
2. "Electric power from an enlarged generator on the truck engine, or from a generator driven from the power take-off, either with or without an intermediate storage battery.
3. "Electricity from storage battery of an electrically propelled truck.
4. "An auxiliary automatic power system, such as a Delco unit or a Kohler Power System.
5. "Heat from the exhaust of the truck motor might be utilized by means of an absorption machine."

A photograph and diagram of an electrically refrigerated Reo speed wagon chassis accompany the article. This truck was equipped with a Kohler model S automatic power plant gasoline driven. This in turn supplies the current for a 400 lb. two cylinder air cooled methyl chloride compressor driven by a ½ h. p. 110 volt D. C. motor. A test was run on this body in the plant of the John J. Grothe Company, Woburn, Mass., with the door of the refrigerated compartment open for one minute at fifteen intervals over a period of three hours. Under these conditions an average temperature of 7.3 degrees F. was recorded with the thermometer in the middle of the floor of the compartment. In a previous section of the article the writers stated that a temperature should be maintained in the refrigerated chamber of the truck of below 15 degrees F. and as low as 5 degrees F.

A second test was made of a five-ton electric truck refrigerated compartment. Here refrigeration was provided by 400 lb. two cylinder air-cooled compressor driven by ½ h. p. 36 volt D. C. motor, operated by current from the battery which propels the truck. The body on this truck was of slightly different design from that in the previous test. This truck was loaded with ice cream and tests carried on under operating conditions. The results showed that the performance would not have been adequate under conditions imposed by a high outside temperature.

Following these reports are the results of tests made on trucks equipped with bodies cooled by the ice and salt method. In one case the average temperature inside was 9 degrees, and in the second case was a — 2 degrees F. A description of the ice and salt solutions used concludes the article.

NEW ENGLAND DISTRIBUTOR HOLDS BANQUET AT BOSTON

The Electric Refrigeration Company of New England, Boston, Mass., recently held a get-together meeting and banquet at Hotel Brunswick, at which 100 salesmen and distributors of the company were present. Charles Pike Dow, president of the company, was on hand and welcomed the guests and at the same time touched briefly on the ground that has been covered by this relatively new organization, which acts as agent in the New England territory for the General Electric Co.

E. R. Gabler, director of retail sales, Miss Scott, treasurer; Charles Gould, manager of the wholesale division; George Wortmann and W. A. Williams, from the manufacturing division of the General Electric Company, were among the guests at the banquet.

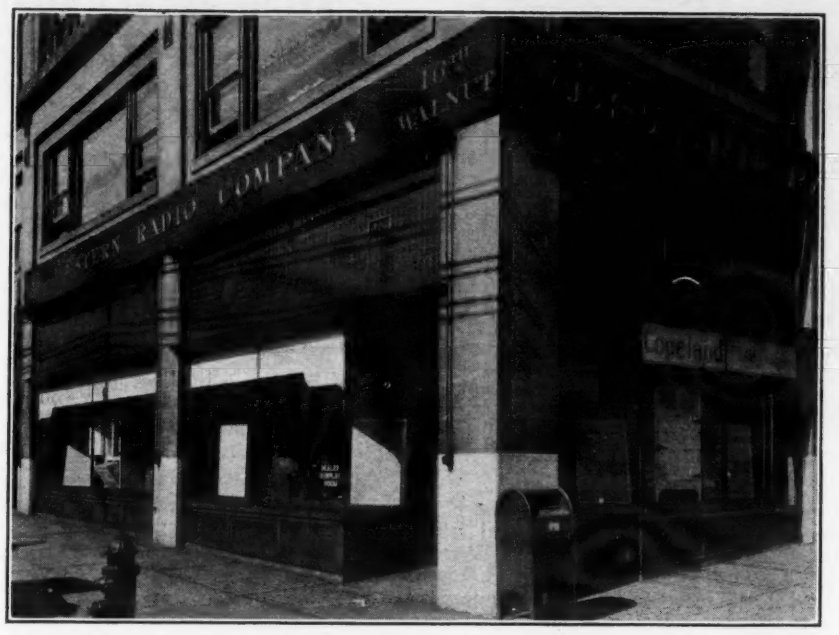
P. C. Jackson to Direct Copeland Sales in Houston

P. C. Jackson has been appointed to handle Copeland sales for the Hurlburt-Still Electric Company of Houston, Texas, in that city and 24 south Texas counties. Jackson, a native of Indiana, has been in Houston since the World War, and has been selling electric refrigeration units for various companies.

Van Aernam Resigns from Pittsburgh Electric League

The Electric League of Pittsburgh announces that effective December 1, George T. Barrows will assume the managership of that organization, succeeding H. Van Aernam, who has resigned.

Kansas City Radio Dealer Pushing Electric Refrigeration



New Salesrooms of the Western Radio Company, Copeland Distributors in Kansas City, Mo., Have Ample Window Display Space on a Prominent Corner of the Business District.

COMBINED SULPHUR DIOXIDE AND AMMONIA PLANTS SUPPLY STORE

Extensive System in Gimbel Bros. Philadelphia Store

When Gimbel Bros. commenced the construction of the new Philadelphia Gimbel Store they were confronted with the problem of adequately refrigerating the various additions to their equipment, as well as tying their new refrigeration load to the ammonia refrigerating machine in the old store building.

The engine room equipment of the installation that was finally decided upon consists of three 35-ton motor-driven carbon dioxide compressors of the fully enclosed type, a large battery of double pipe condensers, with their receivers and other large battery of double pipe brine coolers, with brine surge tank and duplicate brine pumps for circulating the brine to various parts of the building, right along side. This brine system was connected to the brine system of the ammonia plant located about 300 feet away and so arranged that the two systems could be used jointly or individually for any part of the entire store. Also in the engine room was located the ice water cooling system for the entire store building, and its accompanying pumps. This water is cooled by direct expansion carbon dioxide coils located in the pressure tank; then it is pumped throughout the building to the various drinking water fountains.

Twelve floors above the engine room are located the two mammoth fur vaults, which in themselves constitute the largest vault for the storage of furs exclusively in the East.

Over 200,000 feet of sheet corkboard was used in the construction of these vaults, which are of the dry-blast type, the dry cold air being supplied from a coil chamber adjacent to the vaults themselves. The vaults are fully protected by the latest type of burglar alarm systems and by an automatic sprinkler system of the dry type. Special fur brackets and racks were installed in these rooms, which are so arranged that approximately 50,000 garments may be stored in two tiers.

In addition to the fur vaults and drinking water system, refrigeration is provided for the bake shop, grocery department, fish and meat department, cafeteria, restaurant, floral shop, seven soda fountains, candy department and ice cream making department.

The equipment throughout, including the corkboard for the vaults, and refrigerators as well as the mechanical equipment, was furnished by the York Ice Machinery Corporation, Central Construction Co. branch, Philadelphia.

Belding-Hall Appoints New Western Distributor

The Refrigeration Sales Corporation has been recently organized and established in Salt Lake City, Utah, to distribute Belding-Hall electric refrigerators in Utah, Idaho, Colorado, Wyoming, and Texas. Branch offices of the company are to be opened immediately in Denver and Dallas. T. A. Moler is president, Perry A. Clark vice-president and secretary, and F. L. Moler treasurer.

New Copeland Distributor at Norfolk

The Butt-Smith Corporation, 116 Bank Street, Norfolk, Va., has assumed the distributorship of Copeland products formerly held by Gilpin-Smith of that city.

The new firm is headed by Fairlee M. Butt, with S. S. Smith, vice-president, and P. W. Fogle, secretary and treasurer.

Lipman automatic commercial refrigerating equipment will also be handled.

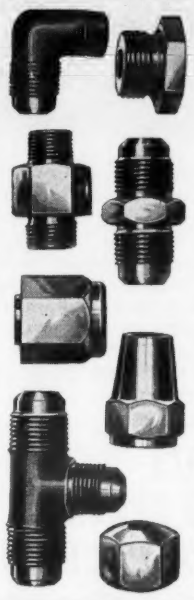
Quits Auto Business to Join Frigidaire

James M. Cavender, Jr., who for the past six years has been in the automobile business in San Antonio, Texas, has joined the San Antonio branch of the Frigidaire Corporation, according to an announcement of E. J. Hermann, branch manager. Cavender has been appointed sales supervisor of the Northern division of the San Antonio district, comprising 22 counties.

H. L. Robillard Addresses Columbus Engineers

H. L. Robillard, sales engineer of the commercial division of the Frigidaire Corporation, Dayton, spoke on the details of electric refrigeration before a meeting of the Columbus section, American Institute of Electric Engineers, on October 28, at the Chittenden Hotel, Columbus, Ohio. Two films were shown in connection with this address, one showing production methods and the other the Frigidaire service plan.

PIPE *and* TUBE
FITTINGS



Made From Brass Rod, Castings or Forgings

For many years we have specialized in the manufacture of brass fittings, in small sizes, for connecting brass and copper tubing.

In addition to fittings made from brass rod and castings, we are now producing similar parts made from BRASS FORGINGS to meet the requirements of Iceless Refrigerator Manufacturers for fittings of a superior type. These fittings will not leak gas, air or liquids under mechanical pressure. They have the compact grain structure, high tensile strength and smooth, flawless surfaces found only in forgings. Our forged fittings are accurately machined, carefully inspected and equal to the most exacting requirements.

Send a sample or blue-print for quotations on parts of a special nature. Catalogue No. R-30, showing our complete line of standard fittings will be mailed on request.

COMMONWEALTH BRASS CORPORATION
DETROIT 5781-5835 COMMONWEALTH AVE. MICH.

MODEL 1621

CABINETS BY
Seeger
SAINT PAUL

The Prestige of the name Seeger makes selling easier and assures a good profit. Those that want a good cabinet are willing to pay the price of Cabinets by Seeger. They are built to receive any Standard Electrical Refrigeration Unit. This makes it possible to sell any one or more Units together with only one line of Cabinets.

SEEGER REFRIGERATOR COMPANY
SAINT PAUL, MINNESOTA

PREDICTS BUSINESS COMING YEAR WILL DWARF '27 FIGURES

Names Factors To Start the Ball Rolling

That the prospects for an unprecedented boom in business in 1928 are very favorable was the opinion expressed by Virgil Jordan, chief economist of the National Industrial Conference Board before the Railway Business Association at the Hotel Commodore, New York City, recently. In urging his listeners to prepare for business in 1928 which will make the years 1925 and 1926 appear as depressions in comparison, Mr. Jordan said:

"All that is needed to start a real boom, which, under existing conditions might easily make all of our earlier booms pale into insignificance, is a reassuring outcome of the national election in 1928, continued improvement in agricultural conditions and a continuation of the upturn in prices that has tended to show itself in recent months."

"If such a favorable combination of circumstances should set the ball rolling, it will remain to be seen whether American business really learned the lesson of moderation in 1920 and whether our banking system can really exercise that control which is imputed to it or demanded of it by many people."

Mr. Jordan continued with the thought that preparation must be made for prosperity just as much as for hard times, and that a business boom is apt to strain transportation facilities and credit resources to the limit and put the self-control of business men and the power of the Federal Reserve system to a real test to prevent serious inflation and subsequent slump.

"The business machine has become much more flexible and adjustable to changes than it was before the war," said Mr. Jordan, "both in its organization and methods, and this increased flexibility is the graetest guarantee against break-down and smash-up. But while it makes any serious depression more unlikely and difficult than formerly, it affords no safeguard against old-fashioned runaway markets and sudden booms."

CHICAGO DISTRIBUTOR ORGANIZES DEALERS FOR WINTER SALES

The dealer organization of R. Cooper, Jr., distributor of General Electric refrigerators in the Illinois district, met on November 8th at the Hotel Sherman, Chicago, Illinois, for its winter sales dinner and meeting.

The afternoon session was taken up in discussion of winter sales activities and the advantages to be derived from increased sales efforts during the winter months.

P. B. Zimmerman, sales manager of General Electric refrigeration department, gave an address pointing out the opportunities of the market and the merchandising problems connected with selling a specialty such as the General Electric Refrigerator.

Following Mr. Zimmerman's address, other members of the Cleveland office presented sales promotion and advertising features designed specifically for the stimulation of winter sales and outlined plans in these two important branches for 1928.

A talk was given by Mr. Dallack, sales manager of R. Cooper, Jr., inc., on various methods of becoming a successful General Electric refrigerator dealer.

The attendance at the evening session was augmented by members of the retail sales force of the Cooper organization. Entertainment was provided during the dinner, the outstanding feature of which was the radio announcer from station KYW, Chicago, who, in addition to rendering several piano solos, called on various members of the assembly.

The business session of the evening was opened by Mr. Timmerman, refrigeration engineer from the Cleveland office of the refrigeration department, who explained the mechanical features of the machine. He also sketched, briefly, the history of refrigeration from the old ice box method up to the present electric refrigeration, and outlined the advantages offered by electric refrigeration over the old methods.

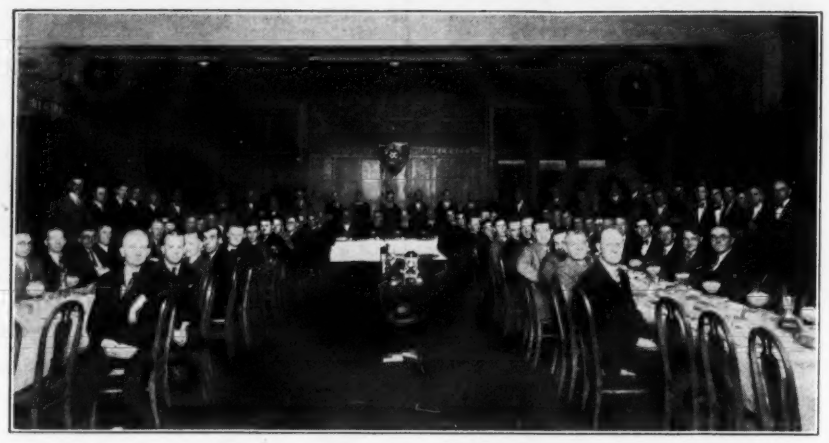
A series of motion pictures were shown illustrating various departments at the Schenectady factory. An educational reel on liquid air, taken in the research laboratory at Schenectady was exhibited and was the cause of much comment.

H. L. Monroe, vice-president of the General Electric Co., in the Chicago district, was present at the dinner and in an address brought out the vastness of the G-E organization. Within a few months Mr. Monroe will celebrate his fortieth anniversary with the General Electric Co. These forty years of service represent his entire business career.

Mr. Zimmerman was again called upon and gave a talk on the history and development of the product and outlined the merchandising and sales possibilities.

R. Cooper, Jr., was chairman of both meetings. Several other distributors were present at his special invitation.

Salt Lake City Company Holds Banquet to Open Record Breaking Campaign



The photograph above comes from the Motors Equipment Company of Salt Lake City, Utah, and was taken at a banquet opening their "Into the Home" campaign. As a result of this campaign the Motor Equipment Company expects to sell more General Electric refrigerators within the next sixty days than has ever been sold in their territory before. A number of valuable prizes have been put up by the company for the salesmen.

One hundred and twenty-five of the company's dealers and distributors and their salesmen attended the banquet. The chief speaker was A. C. Mayer, General Electric Co.; B. C. Ritter, General Electric Co.; C. M. Parry, Utah Power & Light Co.; D. E. Angevine, Motor Equipment Co.; and B. C. J. Wheatlake, local manager of the General Electric Company's offices. Frank Edwards, president of the Motor Equipment Co., acted as chairman.

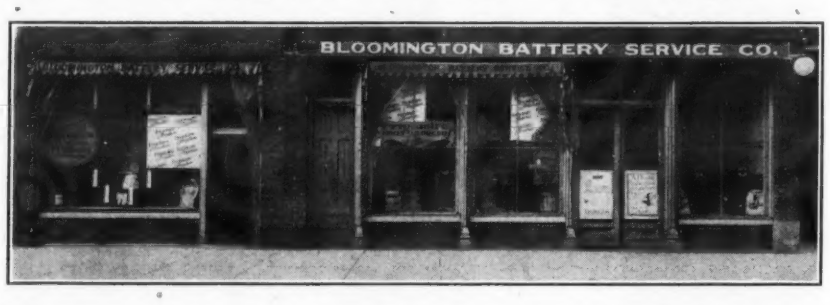
FOLLOW UP ALL SALE AND SERVICE CALLS SAYS DEALER

Give the Customer More Than the Contract Calls For

By Ruel McDaniel

"With us, the sale is ready to start in real earnest, after the machine is delivered and the customer's contract for payment is tucked away in our safe. By that we mean that users of the equipment are the very best sources of new prospects and other sales. It is difficult to devote too much attention to rendering them a little more than just satisfactory service." Thus, in a few words, E. S. Reel, sales manager of the Bloomington Battery Service Company, Bloomington, Illinois, Frigidaire distributors, sizes up the policy that has been the outstanding factor in the building up of a successful business in that locality. The firm has been featuring electrical refrigeration as an increasingly important part of its business for about two and one-half years.

When the electric refrigeration dealer



delivers and installs a machine in a customer's home and then answers that customer's service calls according to agreement, he has fulfilled his contract to the letter and outwardly rendered entirely satisfactory service; but the Bloomington Battery Service Company believes that if the dealer stops here he cuts off the very best sales opportunity he has.

"Electric refrigeration still is new," explains Mr. Reel, "and people don't know a great deal about it. The average person, women especially, is skeptical about a thing she knows little about. It is a part of human nature to be wary of anything new. Accordingly, we believe that the buyer of electric refrigeration ought to have more than just a fulfillment of the dealer's contract with the customer. At least, he should have if the dealer is to profit most by the sale.

"It was our experience at first that it was too easy to lose interest in the customer as soon as the contract was signed. We soon decided that that was where interest should be intensified. We are in as frequent touch with a person after she or he has purchased a machine as before the sale was made."

The company keeps in its file the name and address and telephone number of every customer. By the use of this file the company endeavors to make it unnecessary for any customer ever to have to ask for service. The firm aims to volunteer the needed service before the customer asks for it.

The day after an installation is made, if it is a domestic job, a woman in the office telephones the customer to inquire if the machine is functioning properly and to give any advice she deems necessary to the operation of the equipment. If it is a commercial job, the salesman who handled the deal calls in person as soon as the installation is complete and the machine in operation, to see that the customer knows how to watch the equipment and to see that he is satisfied with its functioning.

Thereafter, salesmen are under instruction to make regular calls upon their customers. These calls are timed according to the classification of the sale; but at most seldom does a month expire that the salesman who sold a customer a machine does not go to the home or plant in person and inquire as to the satisfaction it is giving.

Between visits of the salesman, especially if he is not getting around to see his customers as often as he should, the office supplements his service with calls from the service department, inquiring if the machine continues to serve satisfactorily.

"A customer can be merely a satisfied user of a machine, or he or she can be a regular booster," declares Mr. Reel, "depending largely upon the success the dealer has in impressing the customer with his desire to serve him or her beyond the regular letter of the contract.

"It goes without saying that by continuing our calls right on through after the sale is made, almost as regularly as before we made it, the customers are convinced that we are more than willing to see that they get a little more than they pay for in service. It is only natural that they talk about our desire to serve, when conversing with friends about electric refrigeration. That goes a long way toward getting that initial interest when we start to sell a new prospect.

"Furthermore, when our salesmen backcall on their sales they invariably come in with a list of excellent leads. Customers volunteer to give the men names of persons whom they think are in the market for electric refrigeration. Mrs. Franklin remarks to the salesman who is calling upon her to see that her machine is functioning normally, that her Aunt Emma Hopkins was there the other day, inspected the machine and commented that she was going to get one this spring, too. Mrs. Franklin gladly gives the salesman Aunt Emma's address; and does not object to the salesman's using her name in introducing himself to the aunt in question. That kind of lead is about the next best thing to a sale, and we get a lot like it by backcalling on all sales."

Not only does the firm largely eliminate the necessity of customers calling to request service, but it follows up all service jobs. The following day after a job is serviced a young woman calls the customer by telephone and asks her if the job did what it was supposed to do. If it did, the customer says so and usually appreciates the thoughtfulness of the firm; if not, the company has an opportunity of rectifying the poor service at once, before the customer becomes disgruntled over the unsatisfactory work.

150 Attend First Fall Flurry of G. E. Arctic Club

More than 150 attended the "first fall flurry" of the Arctic Club of the refrigerator department of the General Electric Company in November. The entertainment included selections by the Arctic Four Quartet, instrument and vocal solos, exhibition dances, and the Dempsey-Tunney fight pictures.

Officers of the club have been elected as follows: Henry Link, chief polar bear; William Dunn, general chairman; William Lawless, secretary; F. M. Kinns, chairman of finance committee; J. J. Foley, chairman of press committee, and Gilbert Cromie, chairman of entertainment committee.

FLORIDA FISH COMPANY FREEZES CATCH TO AVOID MARKET FLOOD

Adaptability to Freezing Varies With Species

The Warren Fish Company, of Pensacola, Fla., has turned to electric refrigeration to prevent the flooding of the market twice yearly with quantities of fish which are caught when certain species have their run, according to an article which appears in the October issue of *Refrigeration*.

According to the article the Warren Fish Company owns and operates a fleet of seventeen fishing smacks, thirteen of which are equipped with auxiliary power. The company annually receives more than 3,000,000 pounds of fish. Certain species of fish have runs twice yearly and it is at this time that the market is generally flooded and the price falls to such an extent that the catching is no longer profitable. It was to stabilize this supply of fish that the company installed a freezing plant consisting of a York 6" x 6" compressor driven by a 30 h. p. electric motor using a short belt and idler. The freezing tank measures 16' by 7½' by 4½' and is made of ¼" steel. The first of three cold storage rooms is called the wet room and is used for keeping salt bait, etc., and the temperature is kept from 25 to 30 degrees. The other two rooms are used for the storing of frozen products and the temperature is from 15 to 21 degrees.

The following description of the freezing of the fish is given:

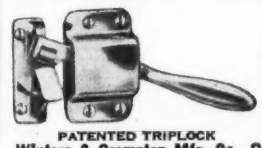
"When we have an excess of fish we pick out the very best stock for freezing. The whole fish is washed in chilled water and packed in a screen basket which holds fifty pounds. Five of these baskets are then stacked in a rack and lowered by an electric hoist into the brine. There is room for five of these racks in the tank, hence we can freeze 1,250 pounds at one time.

"The time required for freezing depends somewhat on the size of the fish to be frozen. With the small fish, we find that they are frozen in one hour, whereas, the large fish require one-half an hour longer. When the fish are taken from the brine they are first lowered into a tank of fresh water to remove as much of the brine as possible; next they are lowered into an ice water bath. After this bath they are dumped into boxes and taken to the storage rooms for three days, and then brought out again to receive their third ice cold back, and then they are returned for storage. It is not until this third bath that the fish really have a glaze. Should the fish be dipped sooner than the third day the glaze would not be a complete covering.

"During our experimenting we discovered some very interesting things. We found that the fish which have few or no scales, as the Spanish Mackerel and the Pompano, show very little or no deterioration. After thawing it requires an expert to tell that they have been frozen. The Red Snapper is much harder to keep, for though the fish is of an attractive reddish color before and after freezing, it will soon turn to a cream color unless the glaze is very thorough.

"Another thing about frozen fish is the possibility it has of being sold by mail. By merely wrapping the fish in paper, and then putting it in a pasteboard box, we have mailed frozen fish as far as Virginia."

Reliable TRADE MARK
CORKBOARD
Manufactured by
Luse-Stevenson Co. 307 N. Mich. Ave., Chicago


Distinctive Refrigeration Hardware
PATENTED TRIPLOCK
Winters & Crampton Mfg. Co., Grand Rapids, Mich.

Write for prices of condenser coils formed to your specifications.
WOLVERINE TUBE COMPANY
1431 Central Ave., Detroit, Mich.
WOLVERINE
SEAMLESS COPPER AND BRASS TUBING

SHAFT SEALS
THERMOSTATS — FLOATS
HIGH PRESSURE CUT-OUTS
LIGHT STAMPINGS
Automatic Controls for Refrigeration and Oil Burners
GOODNOW & BLAKE MFG. CO.
3840 BEAVER STREET DETROIT, MICH.

AUTOMATIC ELECTRIC CONTROLS
NON-DETERIORATING MERCURY SWITCHES
Simple — Dependable
ABSOLUTE ELKHART
CON-TAC-TOR
Accurate — Safe
CORPORATION INDIANA

THE VERY LATEST MARATHON MOTOR
REPULSION START INDUCTION ALTERNTING CURRENT
¼ HP, 110—220 VOLT, 1725 RPM SINGLE PHASE, 60 CYCLE
Also a complete line of direct current motors

Especially developed for the Electric Refrigeration Industry
Write for interesting proposition
Marathon Electric Mfg. Co.
Wausau, Wis.

A Full Line—
Every Ice User a Prospect
Absopure Electric Refrigeration Systems are designed and carefully constructed to meet a wide range of refrigeration needs
Complete Lines of Models and Systems for
Homes Apartments Duplexes Hotels
Restaurants Butchers Delicatessens Grocers
Candy Shops Florists Chain Stores
Dairies Electrotypers Fur Stores, Etc.
Also, Electric Water Coolers and Ice Cream Cabinets
Responsible dealers who are interested in securing a valuable selling franchise are invited to write now for particulars
"In All the World there is Nothing Better"
Absopure FRIGERATOR
Division of General Necessities Corporation
DAVID A. BROWN, President
GENERAL NECESSITIES BUILDING, DETROIT, MICH.

Pittsburgh Distributor Banquets Dealer Organization

The Ochiltree Electric Company, Pittsburgh, was host to its dealers, at a banquet given on October 27 at the Pittsburgh Athletic Club. About 150 guests were present. The banquet was preceded in the afternoon by a business session.

FRIGIDAIRE AND KELVINATOR DISPLAYED AT 'FRISCO FOOD SHOW

All Nations Cooking School a Feature

Attractive and educational exhibits of electric refrigerators were made by the Frigidaire Corporation and the Dickey Kelvinator Sales Company at the second annual California Food and Household Appliance Show held in the San Francisco civic auditorium October 22 to 29th, under the auspices of the Retail Grocers' Association of San Francisco and the *San Francisco Call.*

This exposition was the greatest opportunity ever afforded the household appliance industry to put over its mesage to the entire citizenry of San Francisco. The Exposition, which was the first sponsored by the grocers' association here for eleven years, had a powerful message for the housewife and the public in general.

At the booth of the Frigidaire Corporation there were seyeral models in charge of demonstrators, who were kept busy explaining the operation of the machines to the interested visitors. The white machines were displayed against a black background which showed them to the best advantage. Along the top of the background, in large white letters, was the word "Frigidaire," which could be seen from nearly every section of the auditorium. The machines in the Kelvinator display were also arranged in a very attractive manner, and were lighted by means of powerful electric lights, with reflectors placed directly over the machines.

In addition to these displays of electric refrigerators a number of machines were used in the booths of other concerns, the Virden Packing Company using a Frigidaire in connection with a display of Virden meat products.

An interesting feature of the exposition was the All Nations cooking school conducted by Mary Dowd Reasdon, assisted by culinary experts and chefs of the nationality responsible for the food. Monday was "Southern Day," Tuesday was "Mexican Day," and Wednesday "Chinese Day." An electric refrigerator was in use in the demonstrations.

Copeland Dealer Opens New Home in Whittier, Cal.

The Holley Electric Co., of Whittier, Cal., is now located in its new home at 1130 N. Greenleaf Ave. This company is one of the pioneers of electric refrigeration in Whittier and has handled Copeland products for the past three years.

At the opening on Saturday, October 15, each model of the Copeland line was displayed. A feature of the exhibit was the use of a series of flood lights playing on the individual cabinets.

This company is now serving several towns surrounding Whittier with Copelands through their sub-dealers and a good volume of business is anticipated.

Pardon Us

In the October 26 issue of this paper, in the list of names of those attending the fall meeting of the Detroit Section of the American Society of Refrigerating Engineers, held at the Club Rooms of the Detroit Engineering Society, Monday evening, October 17, the name of E. C. Robinson was shown in connection with the General Electric Company. This was an error and should have been the Century Electric Company of St. Louis, Mo.

Copeland Sells Equipment to Exclusive New York Apartments

This new co-operatively owned apartment house at 660 Park Avenue (shown on the left above) is one of the most exclusive in New York. Such families as the Vanderbilts and the Whitneys own and occupy apartments here. One of the Vanderbilts has the entire first floor.

There are now fourteen Copeland systems in the building. Ten are No. 40 units and four are special installations. All are equipped with Copeland model G compressors.

265 Units in New Apartment Hotel on Riverside Drive

On the right is a new apartment hotel just completed at 150 Riverside Drive, New York City. The building is impressive in appearance and unusual in that it is practically the only apartment hotel on the drive.

Nothing has been spared to render complete comfort and luxury in keeping with the location. Every possible modern convenience has been installed, including 265 Copeland model N5 systems in McDougal cabinets.

Electric refrigeration is an important factor today in the renting of apartments. Apartment house owners are fast realizing this.

INDUSTRY SOUNDING OUT LOWER NOTES OF THE "HEAT OCTAVE"

Electric Refrigeration Now Applied to Many Unexpected Uses

Originally planned to afford better refrigeration in the home, electric refrigeration is now being used in a multitude of ways. As E. G. Biechler, president and general manager of the Frigidaire Corporation, said in a recent statement: "Already industry is beginning to experiment with the lower notes of the heat octave and is beginning to find curious and unexpected uses for cold. One concern," he states, "is using electric refrigeration to test its products before shipping them to cold latitudes. They are tested with a temperature of 7 degrees below zero before they are crated for shipment. Another firm uses this form of refrigeration to bring its product from a liquid to a semi-solid before wrapping. It is a manufacture of cosmetics. A manufacturer of dry batteries keeps his mixtures in electrically refrigerated cold storage, where they are held in a state of perfect preservation until placed in the batteries. Botanical gardens are using it to grow arctic plants under glass alongside of tropical flora.

"Much progress has been made," he continues, "in the better known fields for refrigeration."

REPORT EFFECT OF COMPRESSOR SPEED ON UNIT EFFICIENCY

The effect of compressor speed upon refrigerating capacity and efficiency in the small refrigerating machine is the subject of an article by C. C. Spreen, Detroit, and L. A. Philipp, Ann Arbor, Michigan, appearing in the November issue of *Refrigerating News.* The attempt of the writers of the paper was to study the effect of compressor speed upon refrigerating capacity and efficiency. In making the study a Kelvinator Junior standard compressor, with 1 13/16 inch bore and 1½ inch stroke was connected to a flooded type evaporator with 6 ft. of thermally insulated ½ inch copper tubing. The pressure in the evaporator was kept from three to five points higher than the pressure in the suction line to the compressor.

As a result of the tests made, the conclusion was reached that:

"The compressor efficiency is greater at a high speed (700 r. p. m.) than it is at low speed. It might be possible to build a higher speed compressor of smaller bore and stroke and lower manufacturing costs with an ultimate gain in efficiency, providing, of course, that the compressor is well constructed. There are, however, other considerations to be taken into account besides efficiency. The wear would be more for a high speed compressor than for a low speed compressor, due mainly to the number of times the piston had to travel up and down in the cylinder, and not necessarily directly because of the speed. There is more heating with a high speed compressor than with a lower speed compressor, because more gas is being compressed in unit time. The increased compressor temperature, however, apparently does not affect the capacity of the compressor and the increased wear due to higher compressor temperature might be overcome by using more effective lubrications."

BRAZILIAN DISTRIBUTOR INTRODUCES FRIGIDAIRE SUCCESSFULLY IN RIO

The story of the introduction of refrigeration to Rio de Janerio by the firm of Mestre and Blatgé is told in the October issue of the *American Exporter.* The outstanding success of the company will be realized from the statement that during the past ten years the total yearly business of the concern has increased approximately 40 times.

The company maintains its own printing plant and is at this time duplicating its printing equipment in order to increase its output of advertising material. The success of the company in the sale of Frigidaire electrical refrigeration is partially the cause of this necessity for added printing equipment. Mestre and Blatgé introduced electric refrigeration in Rio de Janerio and have extended this new line very rapidly.

Accompanying the article which appeared in the *American Exporter* were samples of the original advertisements used in introducing Frigidaire to the people of Rio. The first advertisements were extremely explanatory in character. Nothing was left in doubt in addressing this advertising to the public; and no prior knowledge of the characteristics or possibilities of electric refrigeration on the part of the reading public was assumed. The results of this carefully prepared propaganda, both in mail matter and in newspaper advertising were extremely successful. Sales of Frigidaire units even in the first six months of the campaign were satisfactory.

Eight retail salesmen and a salesmanager are now employed on Frigidaire alone. At the beginning the majority of the sales were for private homes, but the company is now entering the commercial field and has already made more than 30 installations in hotels, soda fountains, restaurants, and butcher shops.

The company is local agent for many of the General Motors products in addition to Frigidaire as well as for a line of radio, marine engines, and outboard motors.

"We certainly get a great deal of good out of your paper and can only say 'more power to you'."—D. E. Angevine, manager of sales, Motor Equipment Company, Salt Lake City.

HOUSEHOLD QUALITY SERVICE COMMERCIAL
HERRICK
THE ARISTOCRAT OF REFRIGERATORS
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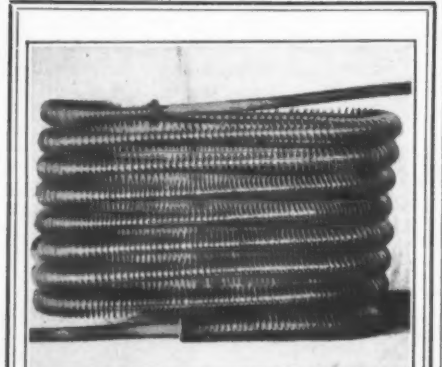

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Additional Specifications of Electric Refrigeration Equipment

Explanation of this Service

The preliminary tabulation of electric refrigerator specifications appeared in ELECTRIC REFRIGERATION NEWS October 12. This data was revised and extended in the issue of November 9. Additional equipment, including commercial machines and ice cream cabinets, are listed below. New data will be published in coming issues and a complete tabulation covering all equipment previously listed will appear in the issue of January 4, 1928.

Notice to Manufacturers

The January 4 issue of ELECTRIC REFRIGERATION NEWS will be a "Catalog and Directory Number." All equipment specifications and directory information which has appeared in previous issues, together with new material and revisions received before January 1, 1928, will be published in this special edition. No charge is made for these listings and those who have been omitted are invited to furnish complete information at once.

	MACHINE							CABINET						
	Models	Motor H. P.	Capacity: Ice Melting Effect	Capacity: Ice Cubes No.	Capacity: Ice Cubes Lbs.	Food Capacity: Cu. Ft.	Food Capacity: Shelf Area Sq. Ft.	Exterior Dimensions: Wd. Dpth. Hgt.	Finish: Exterior	Finish: Interior	Insulation	Weight: Net	Weight: Shpg.	Price: F.O.B.	Price: Installed
Climax Electrical Refrigeration Co., Clinton, Iowa Trade Name—CLIMAX Refrigerant— Models A, B, C, C-J, Ammonia Model D, Methyl Chloride Compressor— Models C, C-J, D, Rotary Models A, B, Reciprocating	D C-J C B A	½ 1 2 3 7½	¼ Ton ½ Ton 1 Ton 2 Ton 4 Ton					28¾x15½x18 7/16 39 x18½x33 52 x21 x36 72 x36 x48 102 x36 x48				224 520 750 1200 2000			
General Necessities Corp., Detroit, Mich. Trade Name—ABSOPURE Refrigerant—Methyl Chloride Compressor—Reciprocating Control—Thermostat	A-5 M-5 A-6 M-7 M-7D A-9 M-9 M-9D M-12 M-12D A-16 Remote 08 812 1218 1825 2535	¼ ¼ ¼ ¼ ¼ ¼ ¼ ¼ ¼ ¼ ¼ ¼ ¼ ¼ ¼ ¼ ¼		36 36 36 54 54 54 54 54 72 72 72 36 54 72 72 90	4.5 4.5 4.5 6.75 6.75 6.75 6.75 6.75 9.0 9.0 9.0 4.5 6.75 9.0 9 11.25	5 5.8 6.1 7.2 7.2 9.5 9.1 9.1 12.36 12.36 16.5 0-8 8-12 12-18 18-25 25-35	8 9.75 8.5 9.75 5.0 13.5 10.5 6.5 15 10.75 19.5	27¼x22⅜x59¼ 28¼x20⅜x60 30 x23¾x69¼ 32¼x23⅛x58⅛ 32¼x23⅛x58⅛ 38¾x24¾x69½ 36⅛x23⅛x58⅛ 36⅛x23⅛x58⅛ 36⅛x23⅛x69⅛ 36⅛x23⅛x69⅛ 47½x26¾x75¼	Wood Wh. Enam. Steel Lacquer Wood Lacquer Steel Lacquer Steel Lacquer Wood Lacquer Steel Lacquer Steel Lacquer Steel Lacquer Steel Lacquer Wood Lacquer	White Enamel White Lacquer Porcelain White Lacquer White Lacquer Porcelain White Lacquer White Lacquer White Lacquer White Lacquer Porcelain	2" Granulated Cork 2" Corkboard 2" Corkboard 2" Corkboard 2" Corkboard 2" Corkboard 2" Corkboard 2" Corkboard 2" Corkboard 2" Corkboard 2" Corkboard	350 345 475 435 465 580 470 500 505 535 825		$225 225 370 310 335 475 360 395 400 440 595 170 210 225 245 260	
General Refrigeration Co., Beloit, —ls. Trade Name—LIPMAN Refrigerant—Ammonia Compressor—Reciprocating Control—Thermostat	50 G 50 Jr. 75 100 150 200 420 710 1010 1500-2000 3000-4000	½ ½ ¾ 1 1½ 2 5 7½ 10						31¾x19½x23½ 24¾x21½x21¾ 31¾x19½x25½ 39 x24 x57 39 x24 x57 42 x31 x58 78 x29 x59 88 x31½x53 88 x31½x53 54½x40 x60 60⅜x40 x69¼				580 440 620 1175 1280 1829 2770 3600 3600 3000 3500			
Rome Manufacturing Co., Rome, N. Y. Trade Name—ROME Refrigerant—Ammonia Compressor—Reciprocating Control—Thermostat	100 200	2 3	1 Ton 2 Ton					48 x29½x49½ 72 x29½x52½				1300 1800	1400 1900		
Savage Arms Corp., Utica, N. Y. Trade Name—SAVAGE Ice Cream Cabinets Refrigerant—Methyl Chloride Compressor—Mercury—Helix Type Control—Thermostat	2 Hole 3 Hole 4 Hole 6 Hole 4 Hole 6 Hole 8 Hole 10 Hole	1/7 1/7 1/7 ¼ 1/7 ¼ ¼ ¼						29⅝x20¾x30 40⅛x20¾x30 52¼x20¾x30 74⅞x20¾x30 35 x29½x30 47⅛x29½x30 59¼x29½x30 72½x29½x30	All Models Blk. Baked Enam.	All Models Hot Galvanized and Cadmium Plated	All Models 3½" Corkboard	281 422 563 811 452 596 691 787			

The Jan. 4 issue of Electric Refrigeration News will be a

Catalog and Directory Number

Facts and figures, specifications and data, and information of inestimable value to manufacturers, distributors, dealers, public utility companies, salesmen, service and installation men are being collected for publication in this important number—the first of the new year.

Machine and cabinet specifications such as appear in this and previous issues will be reprinted and extended to include ice cream cabinets and other commercial equipment in addition to household models. All manufacturers are being invited to furnish the data covering their complete line. No charge will be made for this listing. It will be published as part of the paper's editorial service to the industry.

Directory of Manufacturers

The personnel directory of all manufacturers of machines, cabinets, materials, parts and accessories will be revised and published with additional information regarding branch offices. This directory has proved to be a valuable service to the industry and special effort will be made to collect complete and accurate information regarding every company in the business.

The January 4 issue offers an unusual opportunity for advertisers. It provides a most opportune time to present a detailed description of the complete line of products, since the issue will naturally be retained for reference purposes.

Special extra circulation will also be given this number. Arrangements are being made to furnish copies to libraries, engineers, architects, export agents, government representatives in all foreign countries, and others who represent sources of information for their local or national clientele.

SPACE RESERVATIONS—Advertising rates and detailed information regarding the Jan. 4 issue will be forwarded on request. Copy assistance and suggestions for taking advantage of this special appeal and extra circulation will be given if desired.

Here is Proof of the Value of Electric Refrigeration News as an Advertising Medium

FOLLOWING are the names and addresses of those who enrolled as subscribers to Electric Refrigeration News during a period of *one month* from October 15 to November 15, 1927. This list has not been edited in any way. It simply shows the subscriptions in the order in which they were received during the period mentioned.

Most publications refuse to divulge the names or addresses of their subscribers except perhaps a few selected names picked to impress the advertiser. It is quite obvious that a publication cannot give out its complete subscription list since this list represents the most valuable asset of the paper. We are publishing these truly representative names to show the widespread interest in the subject of electric refrigeration and Electric Refrigeration News.

Check this list against your own and see how many possible customers you are missing if you fail to take advantage of this specialized medium for conveying your sales story to the industry. Keep in mind that this is only 380 names out of a total of 4,337 subscribers enrolled on the date of publication.

Approximately 7,500 copies of each issue are mailed out, samples being distributed to new lists of prospects being furnished by manufacturers, distributors, dealers and others who are actively co-operating with us, because they appreciate the valuable service which Electric Refrigeration News is rendering to the industry.

We make no effort to explain or interpret the character of the companies and individuals named below. Study the list and figure it our for yourself. Remember that Electric Refrigeration News is one of the most highly specialized trade publications in the country. It is devoted to only one subject and no one will subscribe unless definitely interested in some phase of electric refrigeration.

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Barnetz, R. C., Martin-Parry Corp., W. Market St., York, Pa.
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Krisher, A. G., 4129 Frankford Ave., Philadelphia, Pa.
Krisher, Willard B., 4129 Frankford Ave., Philadelphia, Pa.
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